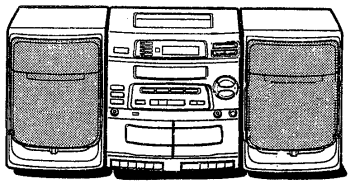
aiwa

aiwa SERVICE

NSX-E6

SERVICE MANUAL



CD CARRY COMPONENT SYSTEM

- BASIC TAPE MECHANISM:TN-21ZSW-1622
- BASIC CD MECHANISM:3ZG3-A6N
- TYPE:HR,G,K,EZ,EEZ

S/M Code No. 09-95A-121-30T

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SPECIFICATIONS

Tuner

<HR MODEL>

FM	87.5–108.0 MHz Antenna: FM antenna
SW	3.8–12.5 MHz Antenna: Ferrite bar antenna
MW	531–1,602 kHz Antenna: Ferrite bar antenna

<EEZ, EZ, K, G MODELS>

FM	87.5–108.0 MHz Antenna: FM antenna
MW	531–1,602 kHz Antenna: Ferrite bar antenna
LW	153–288 kHz Antenna: Ferrite bar antenna

Amplifier

Power output	EEZ, EZ, K models 6.5 W + 6.5 W (DIN MUSIC POWER) 5 W + 5 W (10 % T.H.D./4Ω AC) 4 W + 4 W (DIN 1 % Rated power) HR, G models 5 W + 5 W (EIAJ/4Ω AC)
Power requirements	DC 12 V using eight R20 (size D) batteries HR model AC 110-120 V/220-240 V selectable, 50/60 Hz EEZ, EZ, K models AC 230 V G model AC 230–240 V
Power consumption	HR model 30 W EEZ, EZ, K, G models 40 W

CD player

Disc	Compact disc
Scanning method	Non-contact optical scanner (semiconductor laser application)
Laser	Semiconductor laser λ =780 nm
Rotation speed	Approx. 500–200 rpm/CLV
Error correction	Cross Interleave, Reed Solomon code
Number of channels	2 channels
D/A conversion	1-bit dual

Cassette deck

Track format	4 tracks, 2 channels
Frequency response	Normal tape: 50–12,000 Hz (EIAJ)
Recording system	AC bias
Erasure system	Magnet erase
Motor	DC motor × 1
Heads	Deck 1: Recording/playback head (1) Erasure head (1) Deck 2: Playback head (1)

Common

Dimensions (W × H × D)	266 × 303.7 × 274.6 mm (10 1/2 × 12 × 10 7/8 in.)
Weight	4.15 kg (9.1 lbs) (not including batteries)

Speakers

Cabinet type	2-way bass reflex type
Speakers	120 mm (4 3/4 in.) cone type woofer 27 mm (1 1/8 in.) ceramic type tweeter
Impedance	4 ohms
Allowable max. input	10 W
Dimensions (W × H × D)	200 × 303 × 225.3 mm × 2 (7 7/8 × 12 × 8 7/8 in.)
Weight	1.55 kg (3.2 lbs) × 2

- Design and specifications are subject to change without notice.

■ ACCESSORIES ／ PACKAGE LIST

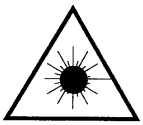
DESCRIPTION で判断できない物は “REFERENCE NAME LIST” を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO.	PART NO.	カンリ NO.	DESCRIPTION
1	S7-738-910-400		INSTRUCTION,BOOK<HR>
1	S7-738-910-200		INSTRUC,BOOK(EE EZ K G)<K,EZ>
1	S7-738-910-300		INSTRUC,BOOK(EE EZ)<EZ>
2	S2-201-100-000		POWER CORD(E)<HR,K,EZ>
2	S2-401-100-010		POWER CORD(K)<K>
2	S2-401-100-030		POWER CORD(G)<G>
3	SR-CDW-600-000		RC,RC-DW600

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!
WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserståling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!
Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

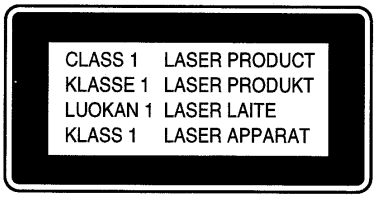
VARNING!
Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!
Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

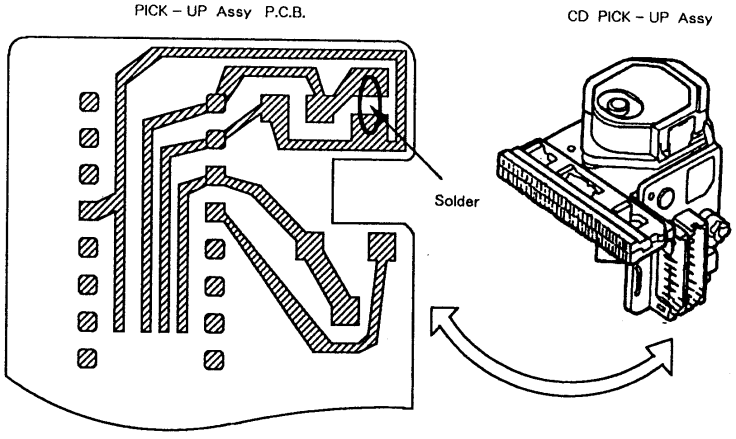
This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.



Precaution to replace Optical block (KSS-212A)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

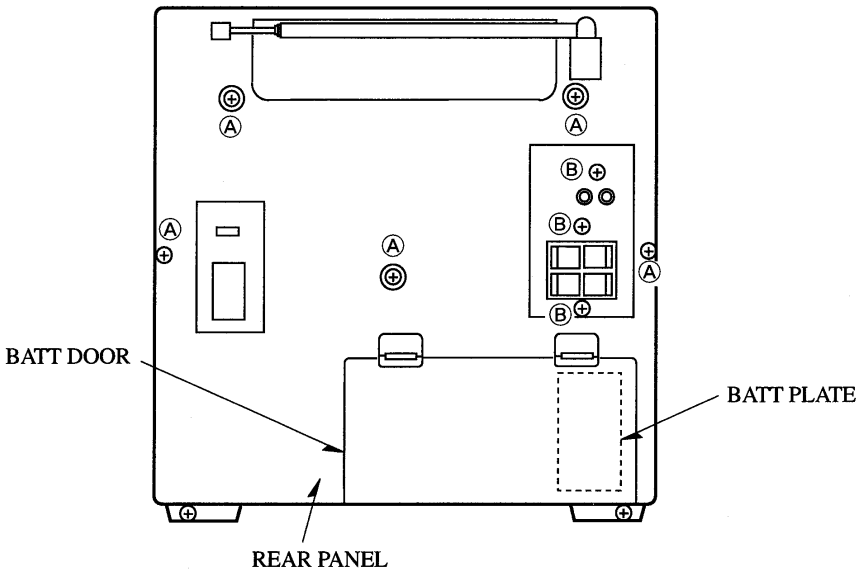
1) After the connection, remove solder shown in the right figure.



DISASSEMBLY INSTRUCTIONS

1. Rear Panel Removal

1) Remove the ten screws (Ⓐ×7, Ⓑ×3).
2) Remove the BATT DOOR.
   Remove the BATT PLATE and remove the rear panel.



ELECTRICAL MAIN PARTS LIST

DESCRIPTION で判断できない物は “REFERENCE NAME LIST” を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO.	PART NO.	カンリ NO.	DESCRIPTION
IC			
	84-CT4-640-010		IC,LC867116W-5844
	87-070-134-010		IC,TA2065F
	87-017-680-010		IC,TA8176SN
	S3-520-920-000		IC,BU2092
	87-070-101-010		IC,TC9284AF
	87-070-083-010		IC,GP1U281X
	87-017-801-080		IC,TA2058F
	87-020-903-010		IC,NJM7805FA
	87-070-231-040		IC,TA2063F
	87-001-982-010		IC,TA7291S
	87-002-268-010		IC,LA1851N
	87-001-376-010		IC,LC7218
	87-017-681-010		IC,TA8126SN
	S4-034-160-000		IC,BA3416BL
	87-027-895-010		IC,BA15218
	87-070-417-010		IC,NJM4558DD
	87-002-901-080		IC,BU4094B
	87-017-804-010		IC,BU4052BC
	87-017-947-010		IC,M62412P
	87-017-564-010		IC,LC7533
	87-002-848-010		IC,TA8229K
⚠	87-001-132-080		IC,ICP-N38
	87-070-416-010		IC,NJU7201L55
TRANSISTOR			
	89-319-232-010		TR,2SC1923
	87-026-291-010		TR,DTC124XS
	89-112-964-010		TR,2SA1296GR
	87-026-447-080		TR,2SC1740S
	89-110-155-010		TR,2SA1015-GR
	87-026-464-010		TR,DTC114TS
	87-026-486-080		TR,DTA144TS
	87-026-486-010		TR,DTA144TS
	87-026-286-010		TR,DTA143ES
	89-501-615-080		TR,2SK161
	87-026-287-010		TR,DTC143ES
	89-502-464-060		TR,2SK246Y
	89-318-154-810		TR,2SC1815-BL
	87-026-572-080		TR,DTA114TS
	89-320-011-210		TR,2SC2001K
	89-322-405-680		TR,2SC2240GR
	89-414-680-080		TR,2SD1468S
	89-109-330-080		TR,2SA933S
	SQ-2SB-137-0E0		TR,2SB1370E
	89-113-187-080		TR,2SA1318T/U
	89-109-521-210		TR,2SA952/K/L
DIODE			
	87-020-465-010		DIODE,1SS133
	S0-041-480-000		DIODE,IN4148
	82-135-799-010		DIODE,IN4148
	87-017-625-090		DIODE,1N53928
	S0-100-911-210		ZENER,M1ZJ9.1C
	S0-100-611-200		ZENER,6.1V 1/2U
	S3-MTZ-J15-A10		ZENER,MTZJ15A
MAIN C.B			
C64	87-010-544-010		CAP,E 0.1-50V
C103	87-010-762-010		CAP,E 220-10V
C104	87-010-402-010		CAP,E 2.2-50V
C108	87-010-401-010		CAP,E 1-50V
C109	87-010-401-010		CAP,E 1-50V
C110	87-010-401-010		CAP,E 1-50V
C111	87-010-546-080		CAP,E 0.33-50V
C113	87-010-421-080		CAP,E 4.7-50V
C116	87-010-498-010		CAP,E 10-16V
C131	87-010-545-010		CAP,E 0.22-50V
C132	87-010-545-010		CAP,E 0.22-50V
C142	87-010-221-810		CAP,E 470-10V
C160	87-010-555-010		CAP,E 100-10V
C167	87-010-496-010		CAP,E 3.3-50V
C194	87-010-555-010		CAP,E 100-10V
C195	87-010-564-010		CAP,E 100-16V
C305	87-010-891-080		CAP,E 47-10V
C306	87-010-891-080		CAP,E 47-10V
C307	87-010-444-080		CAP,E 22-50V
C308	87-010-415-010		CAP,E 10-50V
C309	87-010-545-010		CAP,E 0.22-50V
C310	87-010-545-010		CAP,E 0.22-50V
C311	87-010-762-010		CAP,E 220-10V
C312	87-010-891-080		CAP,E 47-10V
C315	87-010-401-010		CAP,E 1-50V
C316	87-010-401-010		CAP,E 1-50V
C317	87-010-444-080		CAP,E 22-50V
C318	87-010-444-080		CAP,E 22-50V
C319	87-010-415-010		CAP,E 10-50V
C320	87-010-415-010		CAP,E 10-50V
C327	87-010-421-080		CAP,E 4.7-50V
C331	87-010-891-080		CAP,E 47-10V
C501	87-010-401-010		CAP,E 1-50V
C502	87-010-401-010		CAP,E 1-50V
C503	87-010-401-010		CAP,E 1-50V
C504	87-010-401-010		CAP,E 1-50V
C505	87-010-555-010		CAP,E 100-10V
C531	87-010-401-010		CAP,E 1-50V
C532	87-010-401-010		CAP,E 1-50V
C539	87-010-545-010		CAP,E 0.22-50V
C540	87-010-545-010		CAP,E 0.22-50V
C541	87-016-130-080		CAP,E 47-25V
C571	87-010-401-010		CAP,E 1-50V
C572	87-010-401-010		CAP,E 1-50V
C573	87-010-401-010		CAP,E 1-50V
C574	87-010-401-010		CAP,E 1-50V
C579	87-010-891-080		CAP,E 47-10V
C580	87-010-401-010		CAP,E 1-50V
C581	87-010-544-010		CAP,E 0.1-50V
C582	87-010-371-040		CAP,E 470-6.3V
C583	87-010-555-010		CAP,E 100-10V
C591	87-010-401-010		CAP,E 1-50V
C592	87-010-401-010		CAP,E 1-50V
C607	87-010-444-080		CAP,E 22-50V
C608	87-010-444-080		CAP,E 22-50V
C609	87-016-130-080		CAP,E 47-25V
C613	87-010-555-010		CAP,E 100-10V
C614	87-010-555-010		CAP,E 100-10V
C615	87-010-376-010		CAP,E 2200-10V
C616	87-010-376-010		CAP,E 2200-10V
C621	87-010-045-810		CAP,E 100-25V
C622	87-010-387-080		CAP,E 470-25V
C623	87-010-546-080		CAP,E 0.33-50V
C624	87-010-546-080		CAP,E 0.33-50V
C625	87-010-415-010		CAP,E 10-50V
C641	87-010-908-080		CAP,E 220-10V
C720	87-010-415-010		CAP,E 10-50V
C721	87-010-698-010		CAP,E 4700-25V
C722	87-010-385-010		CAP,E 220-25V
C723	87-010-762-010		CAP,E 220-10V
C726	87-010-421-080		CAP,E 4.7-50V
C727	87-010-401-010		CAP,E 1-50V
C728	87-010-221-810		CAP,E 470-10V
C729	87-010-555-010		CAP,E 100-10V
C730	87-010-762-010		CAP,E 220-10V
C741	87-010-403-010		CAP,E 3.3-50V
C831	87-010-415-010		CAP,E 10-50V
C832	87-010-401-010		CAP,E 1-50V
CF1	S0-001-070-000		CER,FIL SFE-10.7MA5-M
CF101	S0-001-070-000		CER,FIL SFE-10.7MA5-M

REF. NO.	PART NO.	カンリ NO.	DESCRIPTION
IFT101	S0-029-200-070		IFT,292MCAS-A6 7HM
J601	S0-020-003-500		JACK,HP 3.5MM
J602	S0-003-240-000		TERMINAL PUSH 4P
J801	S0-002-420-000		JACK,RCA
L1	S1-500-200-050		COIL,FM 15T
L2	S0-550-550-070		COIL,FM 5.5T
L3	S0-450-550-070		COIL,FM
L4	S0-102-270-000		INDUCTOR,2.2UH
L5	S0-450-550-070		COIL,FM
L51	S0-091-310-070		IFT,PA7BRS-A9131CCG<HR>
L51	S0-091-320-070		IFT,PA7BRS-A9132CCG<EXCEPT HR>
L52	S0-091-330-070		IFT,PA119ANS-A9133<HR>
L52	S0-091-310-070		IFT,PA7BRS-A9131CCG<EXCEPT HR>
L61	S0-703-460-000		COIL ANT ASSY<HR>
L61	S0-703-940-000		COIL ANT ASSY<EZ,EEZ>
L61	S0-611-441-200		MW ANT COIL<K,G>
L62	S2-500-041-200		LW ANT COIL<K,G>
L151	S0-104-770-000		INDUCTOR,4.7UH/CEC-4R7K
L152	S0-104-760-000		INDUCTOR,47UH
L191	S0-091-340-070		IFT,A7BRCS-A9134
L192	S0-100-140-000		INDUCTOR,100UH
L301	S0-091-300-070		IFT,126ANS-A9130YWD
MFT101	S0-006-600-070		IFT,CER FIL
SFR101	S2-030-650-000		SFR,20K
SFR102	S1-030-650-010		SFR,10K
SFR751	S2-020-650-000		SFR,2K
SW301	S0-062-200-000		SW,REC 6P2T
TC51	S2-001-690-000		TRIMMER TZ03R300FR169
TC52	S2-001-690-000		TRIMMER TZ03R300FR169<HR>
TC52	S2-101-690-000		TRIMMER TZ03T110FR169<EXCEPT HR>
VC1	87-002-730-010		VARI,CAP SVC203
VC2	87-002-730-010		VARI,CAP SVC203
VC3	87-002-730-010		VARI,CAP SVC203
VC51	81-754-634-010		DIODE,VARI CAP KV1260TS2
VC52	81-754-634-010		DIODE,VARI CAP KV1260TS2
X101	87-030-218-010		CER,RESO KBR457HS15
X151	S6-072-000-000		X'TAL,7.2MHZ

FRONT C.B

C7	87-010-927-040		CAP,E 0.47-50V
C8	87-010-401-010		CAP,E 1-50V
C10	87-010-420-080		CAP,E 10-6.3V
C12	87-010-550-070		CAP,E 100-6.3V
C18	87-010-908-080		CAP,E 220-10V
C98	87-010-555-010		CAP,E 100-10V
C404	87-010-401-010		CAP,E 1-50V
C405	87-010-545-010		CAP,E 0.22-50V
C407	87-010-401-010		CAP,E 1-50V
C408	87-010-553-040		CAP,E 47-16V
C409	87-010-555-010		CAP,E 100-10V
C410	87-010-412-010		CAP,E 10-25V
C413	87-010-412-010		CAP,E 10-25V
D4	87-002-285-010		LED,5-5(RED)
D5	87-002-355-010		LED,3.1MM(RED)
D6	87-002-355-010		LED,3.1MM(RED)
D7	87-002-355-010		LED,3.1MM(RED)
D8	87-002-355-010		LED,3.1MM(RED)
D9	87-002-285-010		LED,5-5(RED)
D10	87-002-285-010		LED,5-5(RED)
D11	87-002-285-010		LED,5-5(RED)
D21	87-017-719-010		LED,3MM(GRN)
D22	87-017-719-010		LED,3MM(GRN)
D23	87-017-719-010		LED,3MM(GRN)
D24	87-017-719-010		LED,3MM(GRN)
D25	87-017-719-010		LED,3MM(GRN)
D26	87-017-719-010		LED,3MM(GRN)
D27	87-017-719-010		LED,3MM(GRN)
D28	87-017-719-010		LED,3MM(GRN)
D29	87-017-719-010		LED,3MM(GRN)
D30	87-017-719-010		LED,3MM(GRN)
D33	87-017-719-010		LED,3MM(GRN)
D34	87-017-719-010		LED,3MM(GRN)
D35	87-017-719-010		LED,3MM(GRN)
D36	87-017-719-010		LED,3MM(GRN)
J401	S0-515-460-000		JACK,MIC 3.5MM
L1	S0-100-160-000		INDUCTOR 10UH
L10	87-005-647-080		COIL,10UH
L11	87-005-647-080		COIL,10UH
L401	S0-100-260-000		COIL,1UH
LCD1	S1-120-040-350		LCD,DISPLAY
SW1	SK-HV9-010-000		SW,TACT
SW2	SK-HV9-010-000		SW,TACT
SW3	SK-HV9-010-000		SW,TACT
SW4	SK-HV9-010-000		SW,TACT
SW5	SK-HV9-010-000		SW,TACT
SW5	SK-HV9-010-000		SW,TACT
SW7	SK-HV9-010-000		SW,TACT
SW8	SK-HV9-010-000		SW,TACT
SW9	SK-HV9-010-000		SW,TACT
SW10	SK-HV9-010-000		SW,TACT
SW11	SK-HV9-010-000		SW,TACT
SW12	SK-HV9-010-000		SW,TACT
SW13	SK-HV9-010-000		SW,TACT
SW14	SK-HV9-010-000		SW,TACT
SW15	SK-HV9-010-000		SW,TACT
SW16	SK-HV9-010-000		SW,TACT
SW17	SK-HV9-010-000		SW,TACT
SW18	SK-HV9-010-000		SW,TACT
SW19	SK-HV9-010-000		SW,TACT
SW20	SK-HV9-010-000		SW,TACT
SW21	SK-HV9-010-000		SW,TACT
VR401	S1-030-120-010		RES,VARIABLE 10KA
X1	S3-327-680-000		X'TAL,32.768KHZ
X2	87-030-214-080		RESONATOR KBR-6

CD C.B

C4	87-010-380-010		CAP,E 47-16V
C5	87-010-380-010		CAP,E 47-16V
C6	87-010-555-010		CAP,E 100-10V
C9	87-010-415-010		CAP,E 10-50V
C10	87-010-380-010		CAP,E 47-16V
C13	87-010-415-010		CAP,E 10-50V
C14	87-010-444-080		CAP,E 22-50V
C22	87-010-965-080		CAP,E 33-16V
C26	87-010-555-010		CAP,E 100-10V
C35	87-010-555-010		CAP,E 100-10V
C38	87-010-421-080		CAP,E 4.7-50V
C44	87-010-762-010		CAP,E 220-10V
C48	87-010-380-010		CAP,E 47-16V
C50	87-010-380-010		CAP,E 47-16V
C70	87-010-045-810		CAP,E 100-25V
C85	87-010-401-010		CAP,E 1-50V
C100	87-010-380-010		CAP,E 47-16V
C101	87-010-402-010		CAP,E 2.2-50V
C102	87-010-402-010		CAP,E 2.2-50V
C124	87-010-555-010		CAP,E 100-10V
C126	87-010-221-810		CAP,E 470-10V
C132	87-010-221-810		CAP,E 470-10V
FC1	S1-102-201-300		CABLE FCC
L1	87-005-647-080		COIL,10UH
SFR1	S1-030-850-000		SFR,10K
SFR2	S1-040-851-020		SFR,100K
SFR3	S1-040-851-020		SFR,100K
SFR4	S1-040-851-020		SFR,100K
X1	S0-016-930-000		CER,RESO 16.93MHz

POWER C.B

⚠	S7-900-000-000		HOLDER,FUSE
C743	87-010-421-080		CAP,E 4.7-50V
⚠F701	S0-315-200-030		FUSE,3.15A/250V

REF. NO.	PART NO.	カンリ NO.	DESCRIPTION
DRIVE C.B			
M1	87-045-356-019		MOT,RF-310TA 30
M2	87-045-358-019		MOT,RF-310TA 43
SW1	87-036-340-019		SW,LEAF LSA-1121
MOTOR CD C.B			
M1	87-045-305-019		MOTOR, RF-500TB
SW1	87-036-110-019		SW,PUSH SPPB 62
SW2	87-036-110-019		SW,PUSH SPPB 62

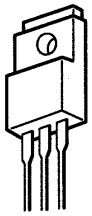
TRANSISTOR ILLUSTRATION

ECB

2SA952
2SA1015
2SA1296
2SA1318
2SC1815
2SC1923
2SC2001
2SC2240

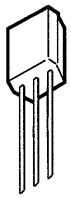
ECB

2SA933S
2SC1740S
2SD1468S
DTA114TS
DTA143ES
DTA144TS
DTC114TS
DTC124XS
DTC143ES



BCE

2SB1370



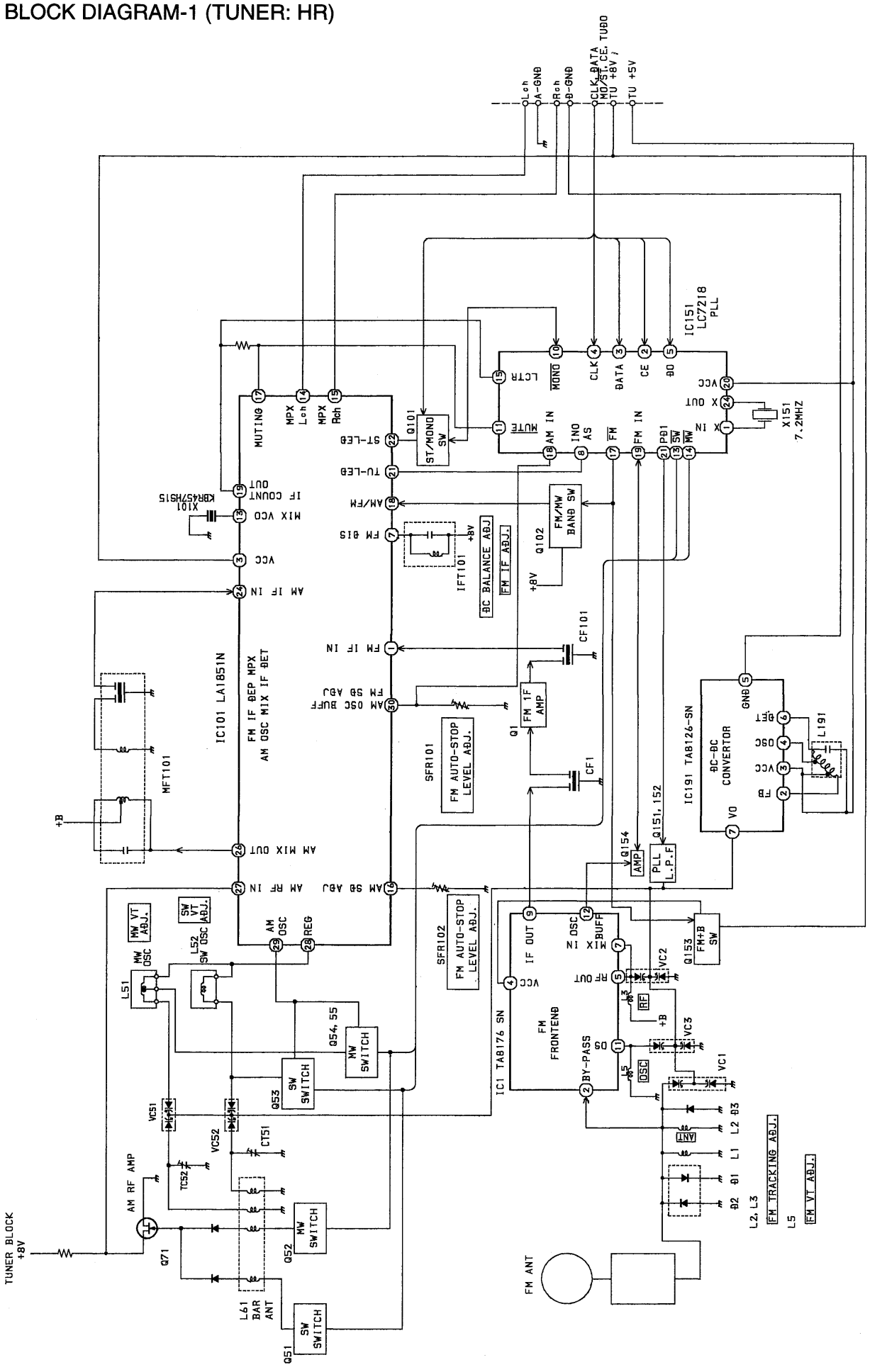
DSG

2SK161

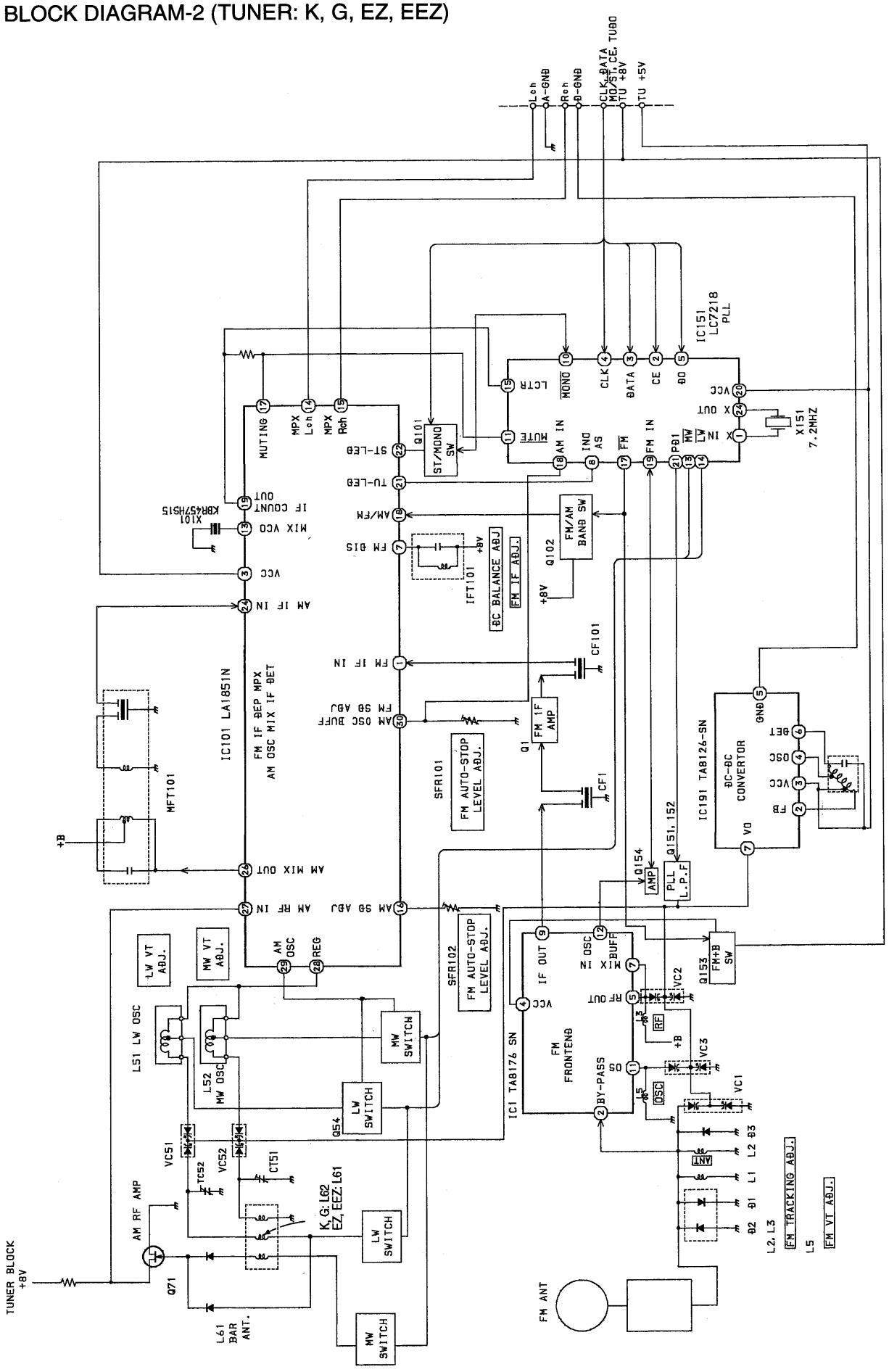
SGD

2SK246

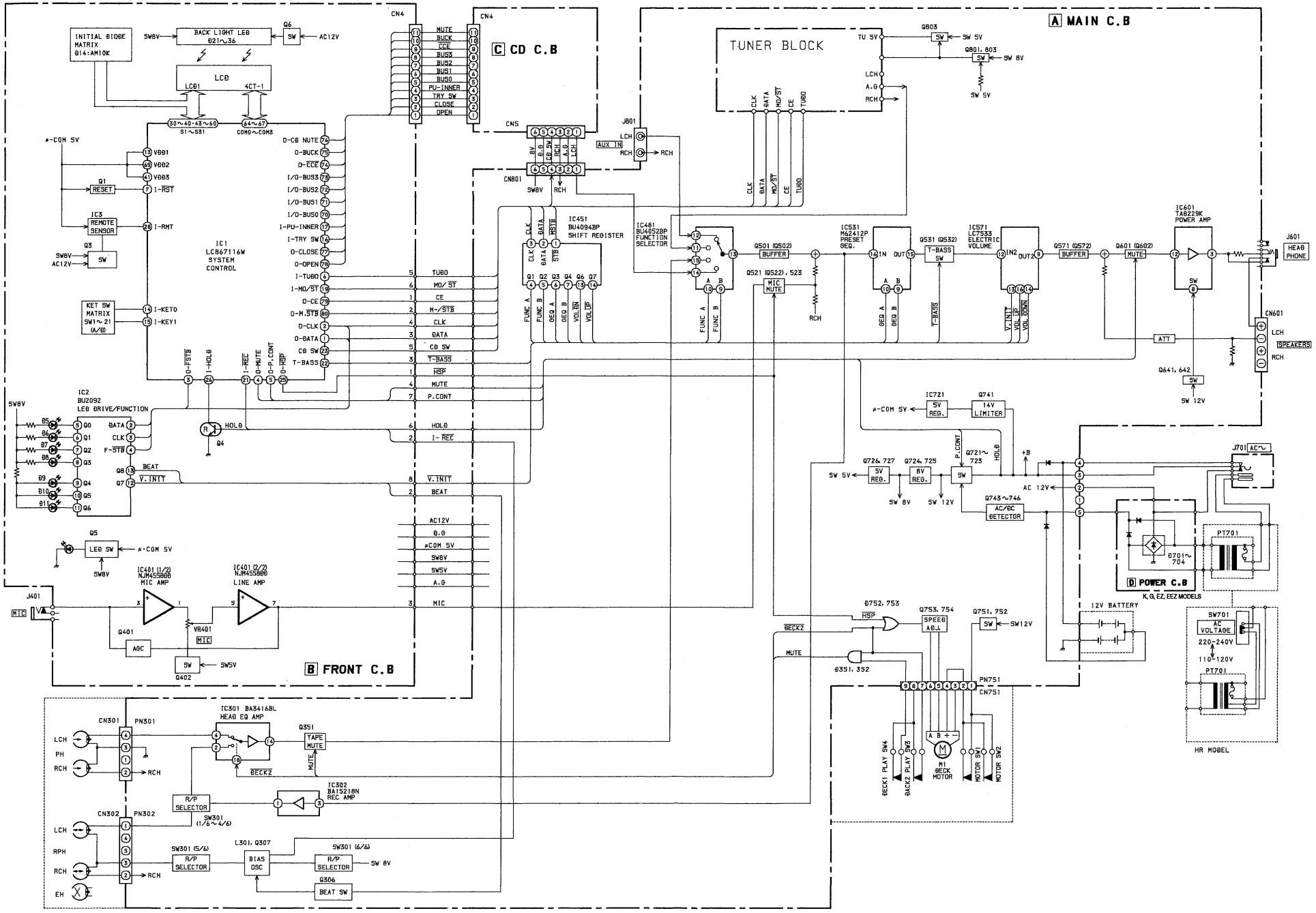
BLOCK DIAGRAM-1 (TUNER: HR)



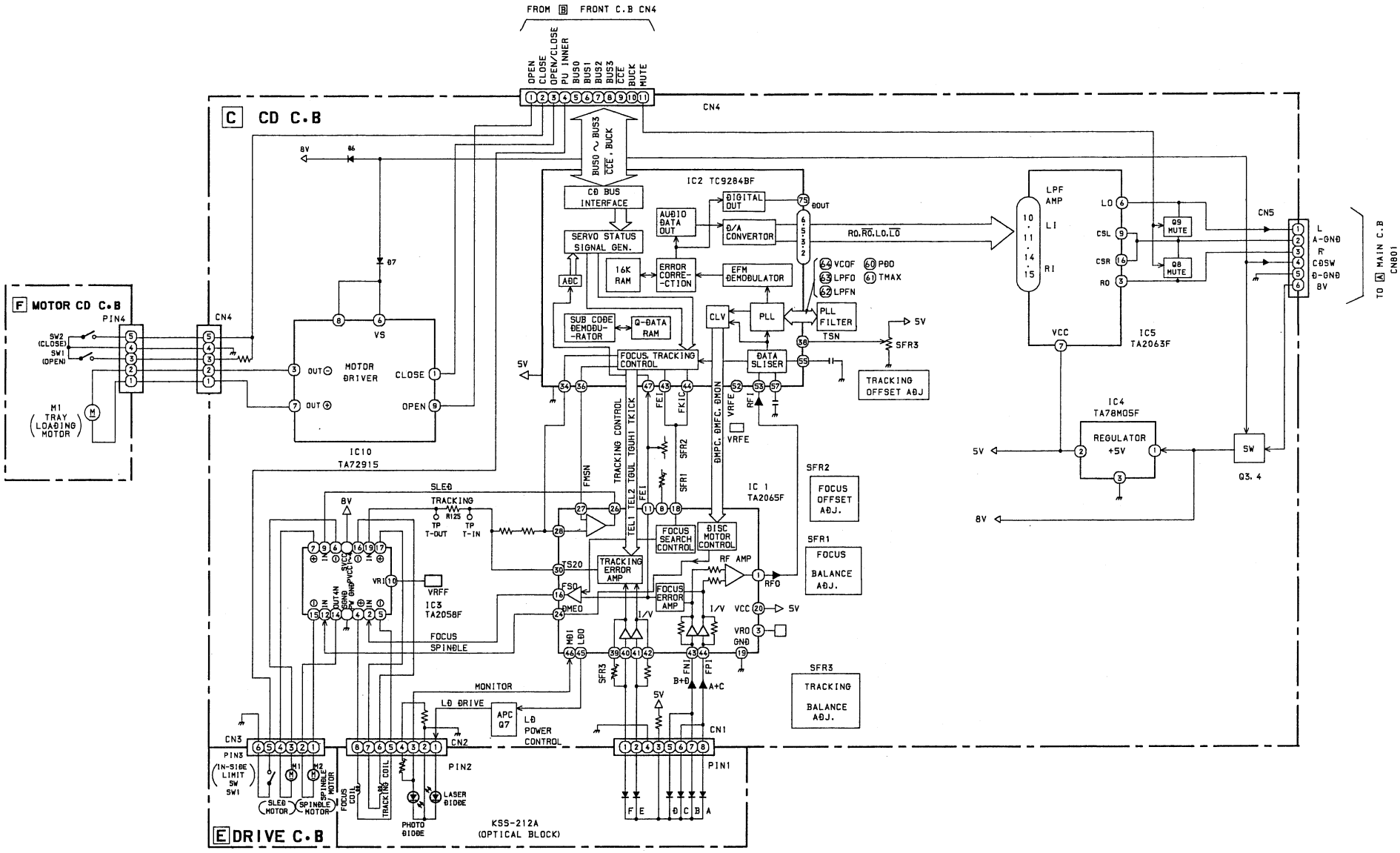
BLOCK DIAGRAM-2 (TUNER: K, G, EZ, EEZ)



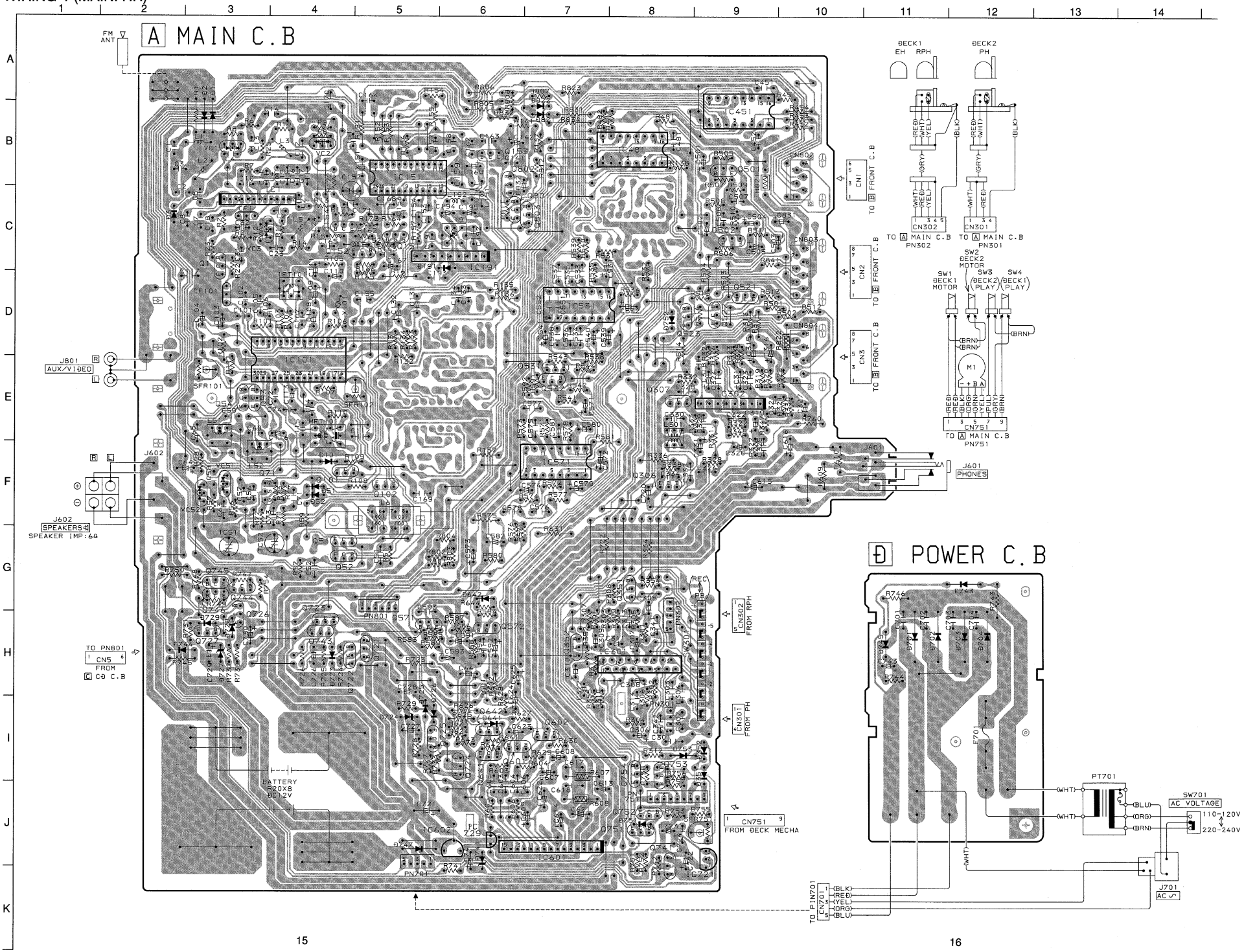
BLOCK DIAGRAM-3 (MAIN)



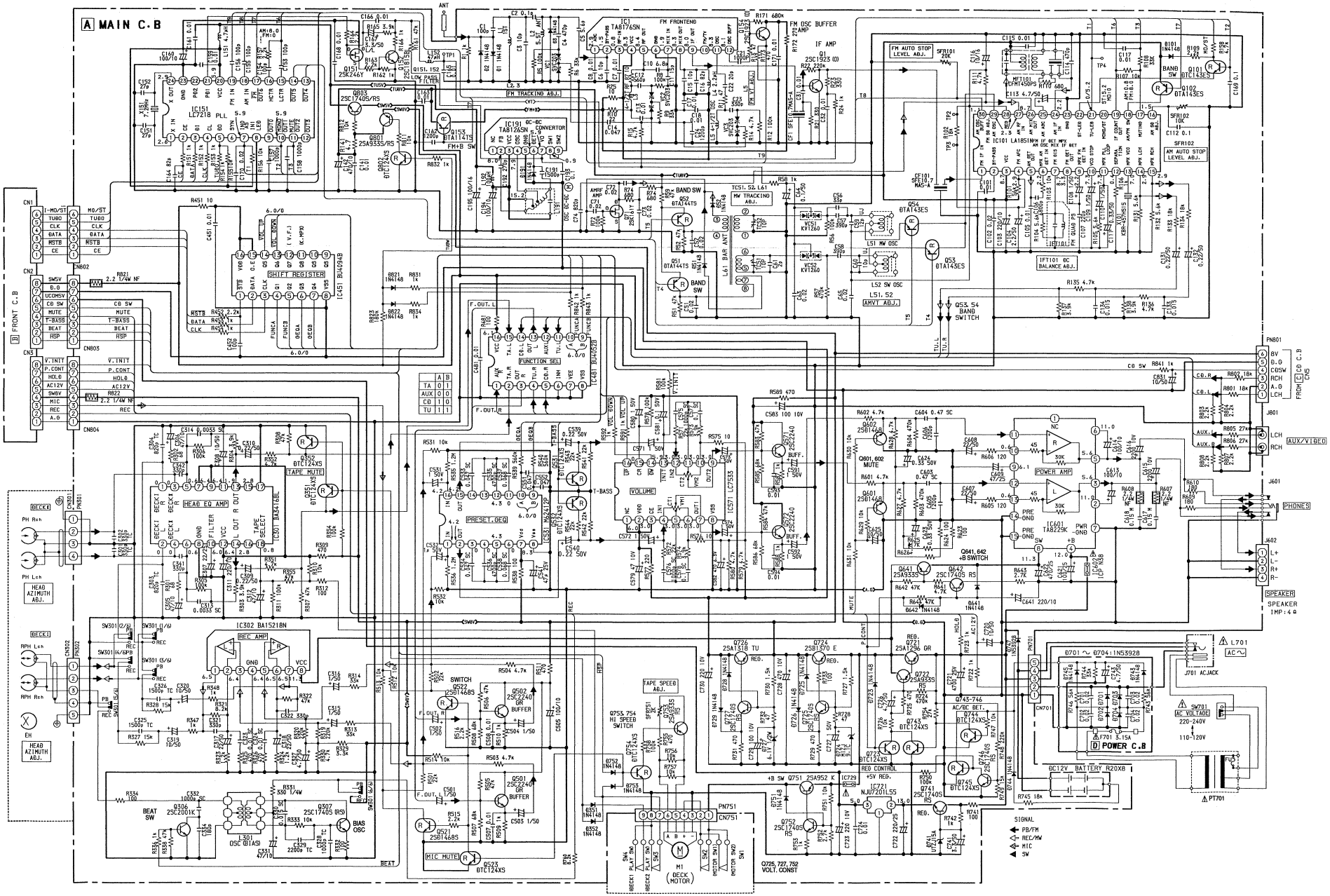
BLOCK DIAGRAM-4 (CD)



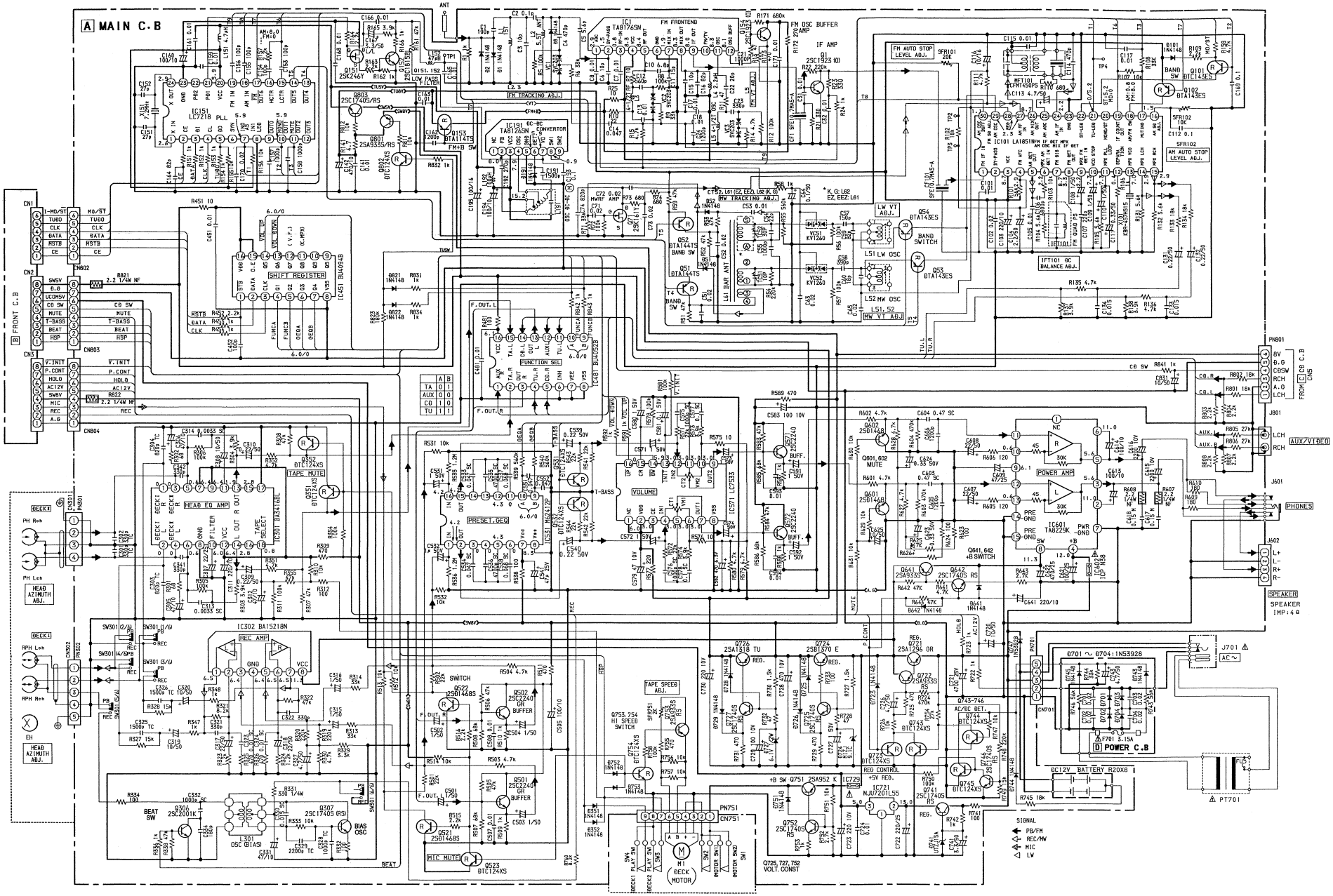
WIRING-1 (MAIN: HR)

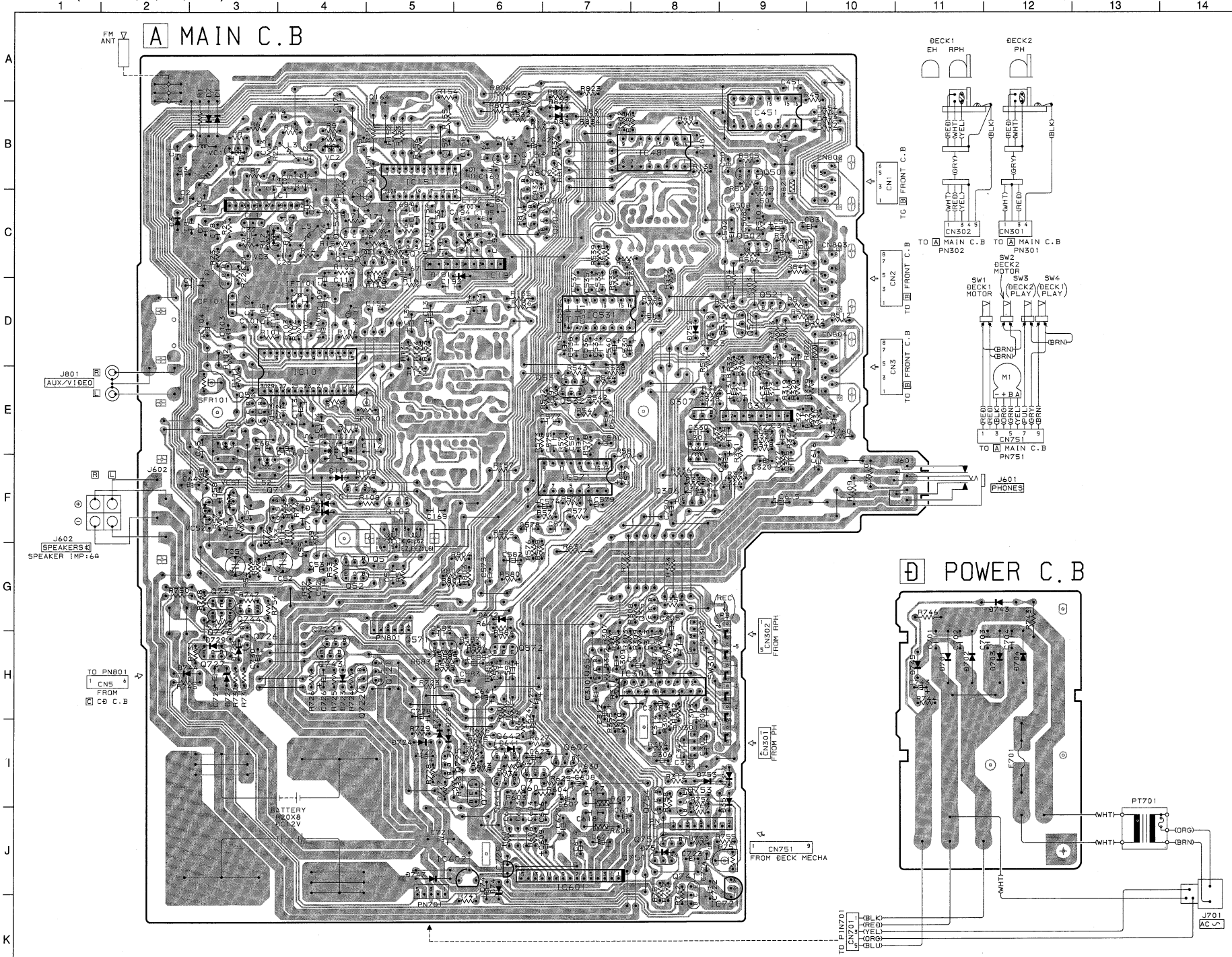


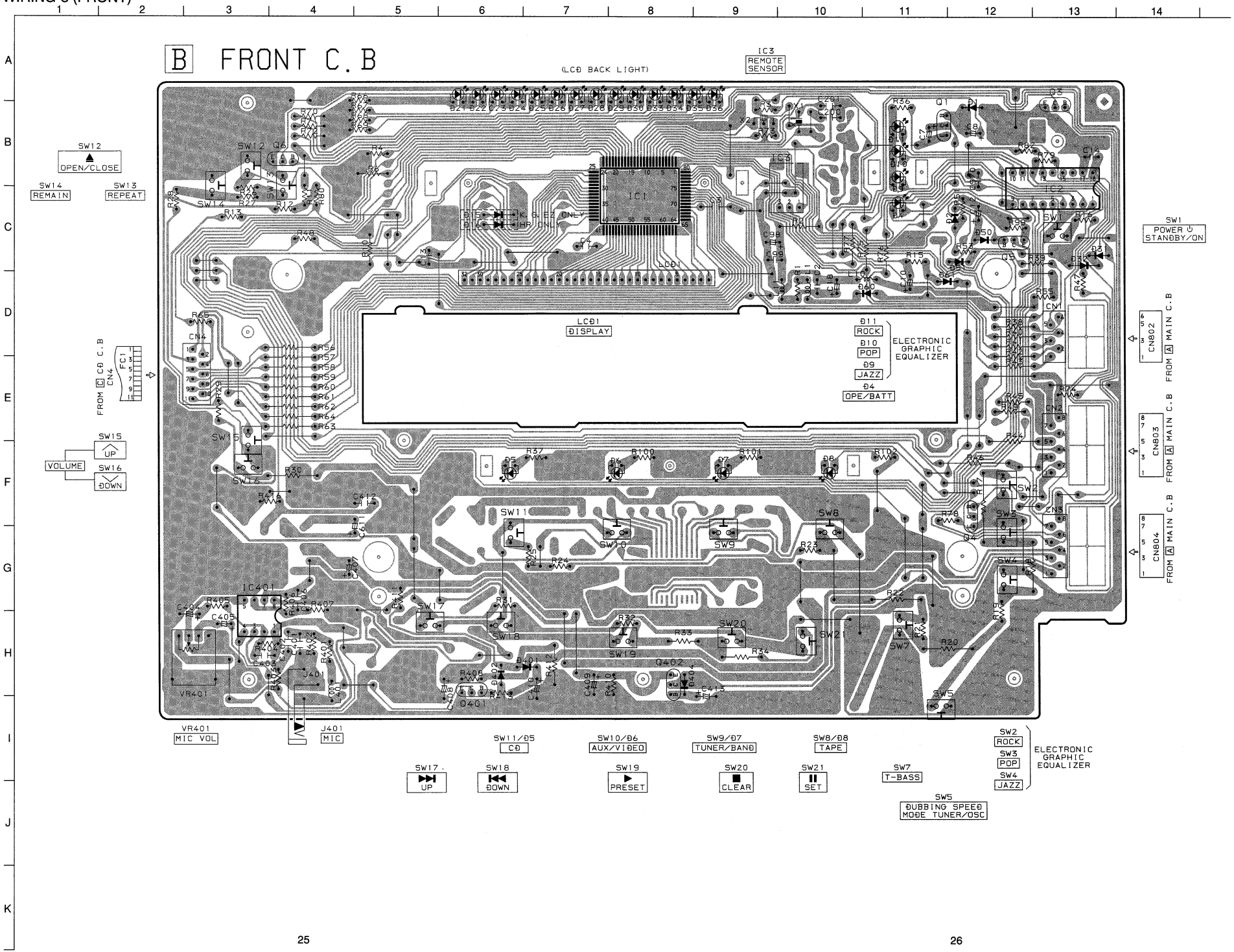
SCHEMATIC DIAGRAM-1 (MAIN: HR)



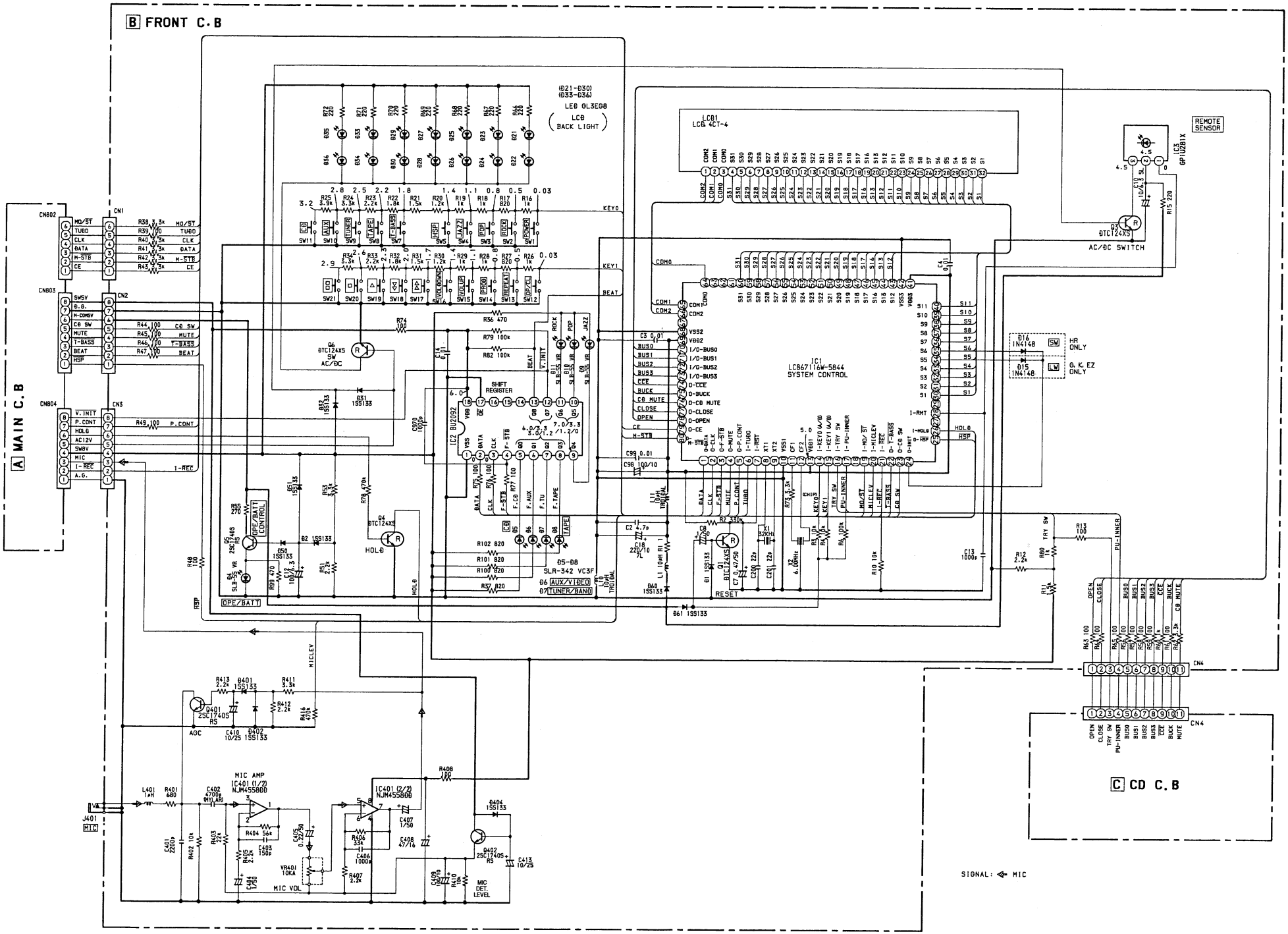
SCHEMATIC DIAGRAM-2 (MAIN: K, G, EZ, EEZ)

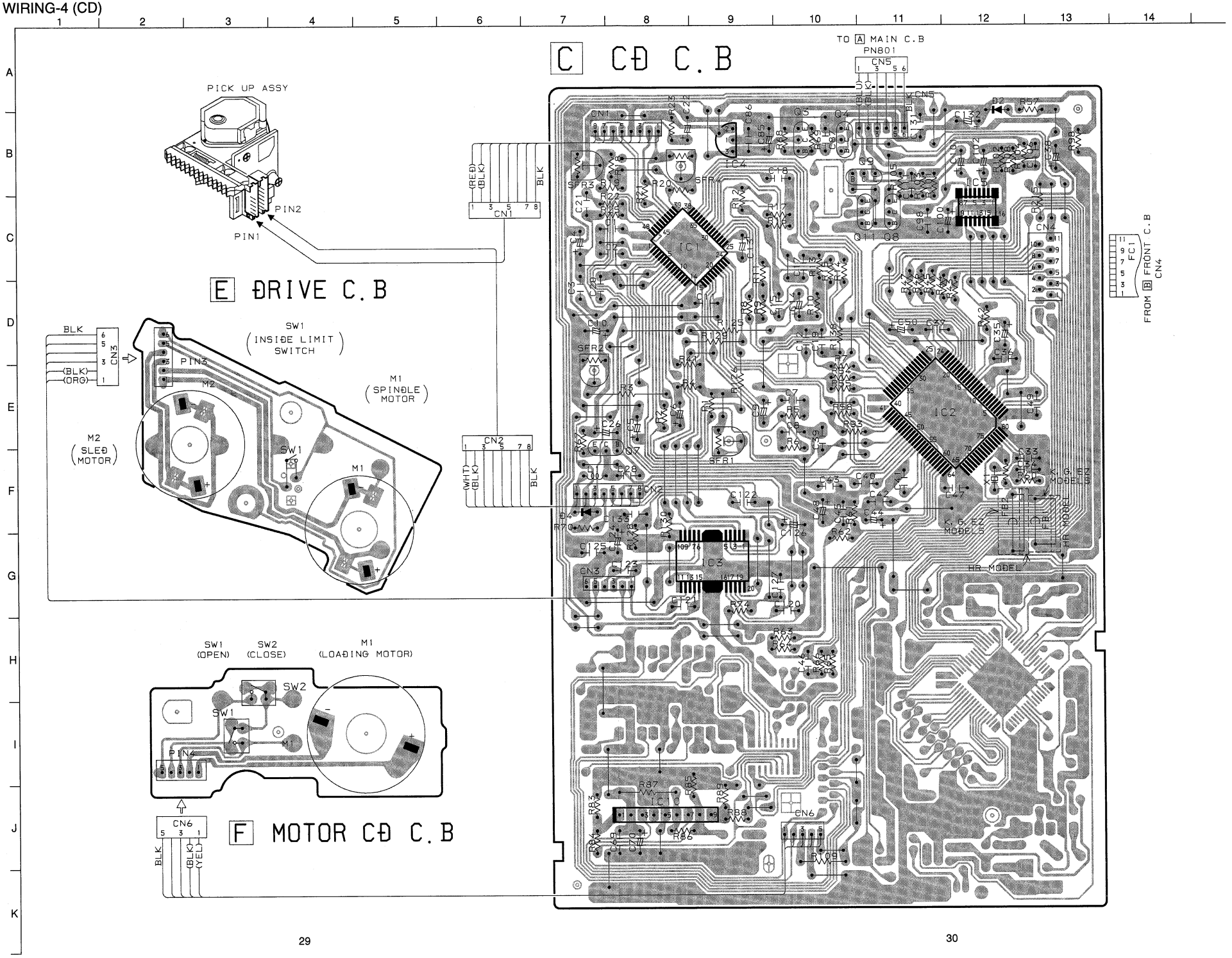



A MAIN C.B
Đ POWER C.B
FM ANT
J801 AUX/VIDEO
J602 SPEAKERS
SPEAKER IMP:6Ω
J601 PHONES
ĐECK1 EH RPH
ĐECK2 PH
TO A MAIN C.B PN302
TO A MAIN C.B PN301
TO A MAIN C.B PN751
TO B FRONT C.B
SW1 ĐECK1 MOTOR
SW2 ĐECK2 MOTOR
SW3 (ĐECK2) (PLAY)
SW4 (ĐECK1) (PLAY)
M1
CN751 FROM ĐECK MECHA
CN302 FROM RPH
CN301 FROM PH
TO PN801
CN5 FROM C CØ C.B
BATTERY RØX6 2Ω 2V
PT701
J701 AC IN
TO PIN701
CN701
(BLK)
(RED)
(YEL)
(ORG)
(BLU)
(WHT)
(GRY)
(BRN)

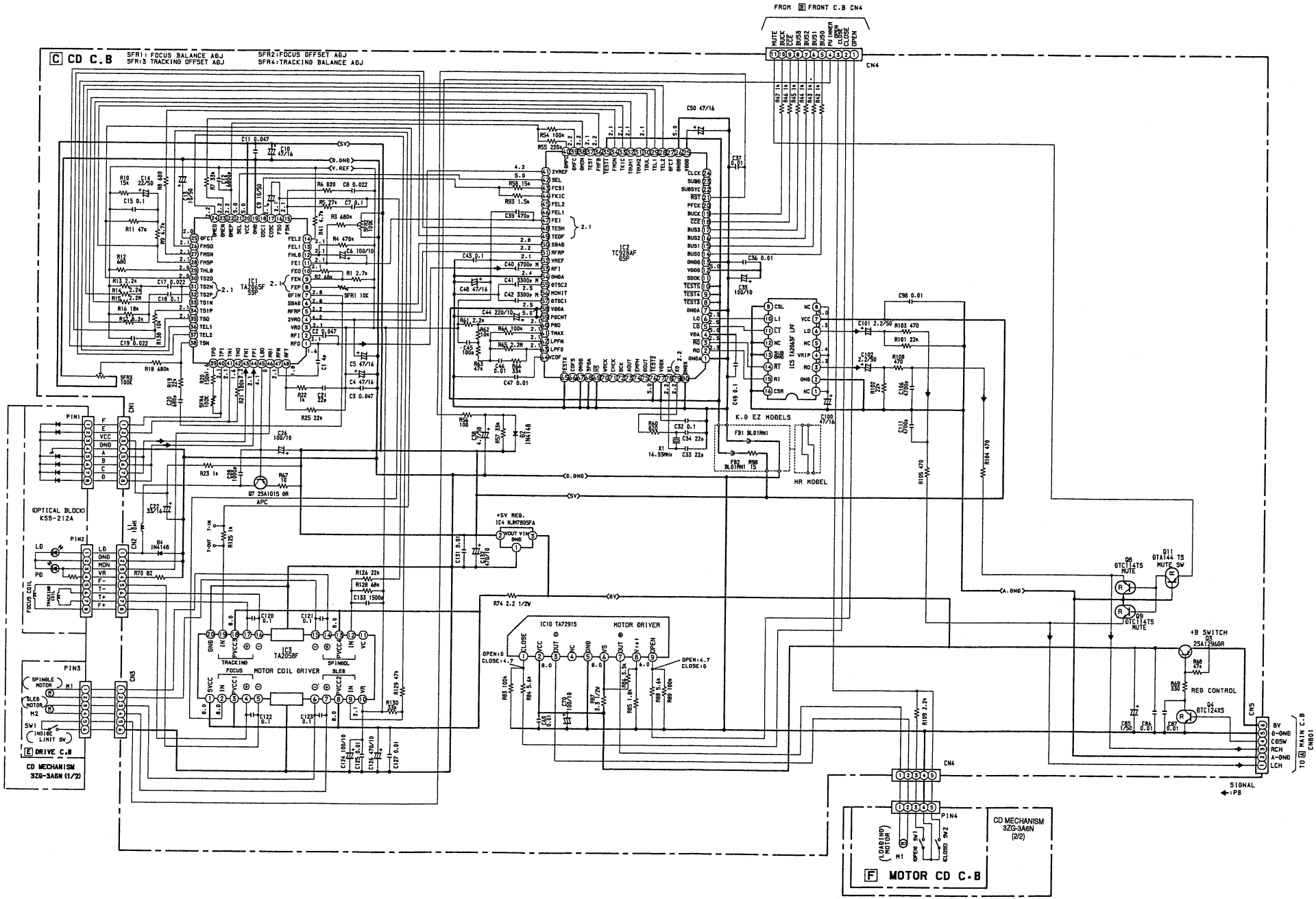

B FRONT C.B
(LCD BACK LIGHT)
IC3
REMOTE
SENSOR
SW12
OPEN/CLOSE
SW14
REMAIN
SW13
REPEAT
SW1
POWER
STANDBY/ON
LCD1
DISPLAY
D11
ROCK
D10
POP
D9
JAZZ
D4
OPE/BATT
ELECTRONIC
GRAPHIC
EQUALIZER
FROM C CD C.B
CN4
FC1
SW15
UP
VOLUME
SW16
DOWN
CN802
CN803
CN804
FROM A MAIN C.B
IC1
IC2
IC401
VR401
MIC VOL
J401
MIC
SW11/D5
CD
SW10/D6
AUX/VIDEO
SW9/D7
TUNER/BAND
SW8/D8
TAPE
SW17
UP
SW18
DOWN
SW19
PRESET
SW20
CLEAR
SW21
SET
SW7
T-BASS
SW5
DUBBING SPEED
MODE TUNER/OSC
SW2
ROCK
SW3
POP
SW4
JAZZ
ELECTRONIC
GRAPHIC
EQUALIZER

SCHEMATIC DIAGRAM-3 (FRONT)

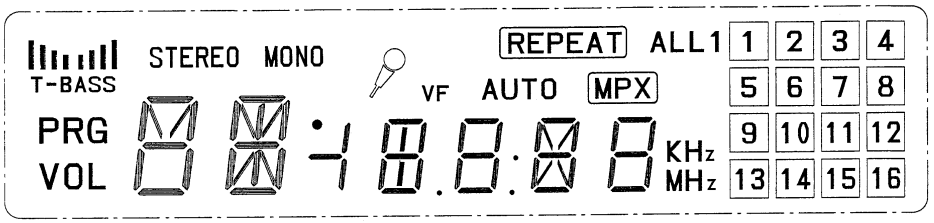


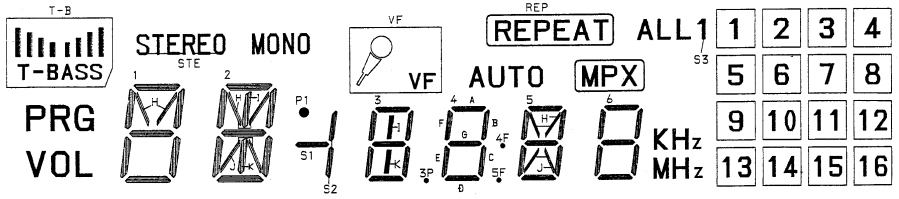

C CÐ C.B
TO A MAIN C.B
PN801
CN5
PICK UP ASSY
PIN2
PIN1
CN1
(RED)
(BLK)
BLK
E ÐRIVE C.B
BLK
CN3
(BLK)
(ORG)
SW1
(INSIÐE LIMIT
SWITCH)
PIN3
M2
M1
(SPINÐLE
MOTOR)
M2
(SLEÐ
MOTOR)
SW1
M1
CN2
(WHT)
(BLK)
BLK
SW1
(OPEN)
SW2
(CLOSE)
M1
(LOAÐING MOTOR)
SW2
SW1
PIN4
CN6
BLK
(BLK)
(YEL)
F MOTOR CÐ C.B
FROM B FRONT C.B
CN4
FC1
K,G,EZ
MODELS
HR MODEL
IC1
IC2
IC3
IC4
IC5
IC10
Q1
Q2
Q3
Q4
Q5
Q6
Q7
Q8
Q9
Q10
Q11

SCHEMATIC DIAGRAM-4 (CD)



LCD DISPLAY



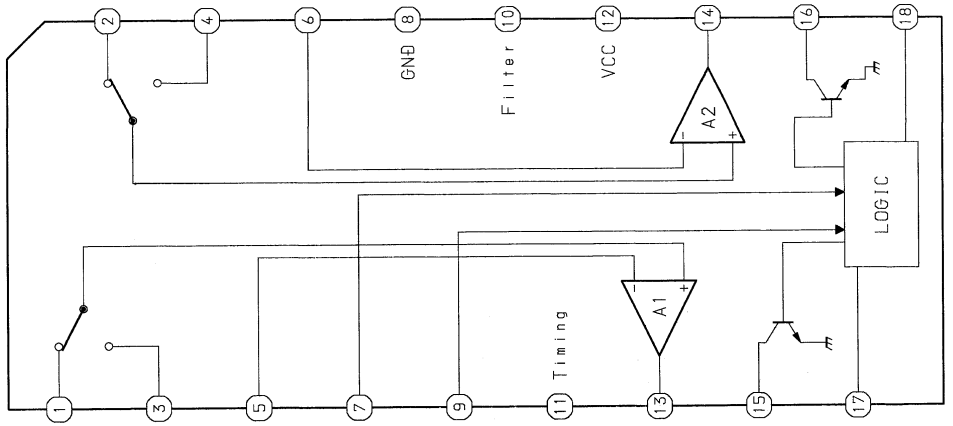


NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
COM1	COM1	—	—	TOB	1A	1H	—	2I	2G	2K	2B	MONO	REP	3F	3A
COM2	—	COM2	—	PRG	1F	1G	1B	2A	2H	2J	2C	P1	VF	3G	31K
COM3	—	—	COM3	VOL	1B	1Đ	1C	STE	2F	2E	2Đ	S1	S2	3E	3Đ

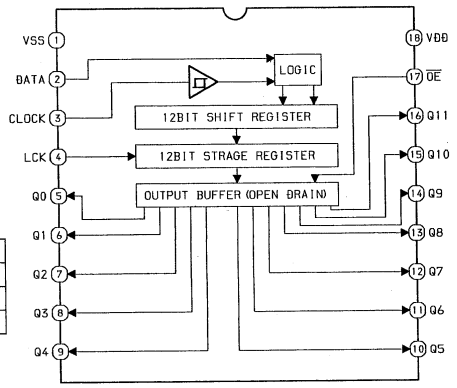
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
3B	4F	4B	2A	AUTO	5A	5B	6F	6B	6A	5	6	7	8	4	MPX	ALL
3C	4G	4C	4P	5F	5HJ	5C	6G	6C	KHZ	9	10	11	12	3	—	—
3P	4E	4Đ	5P	5E	5G	5Đ	MHZ	13	MHZ	13	14	15	16	2	1	S3

IC BLOCK DIAGRAM

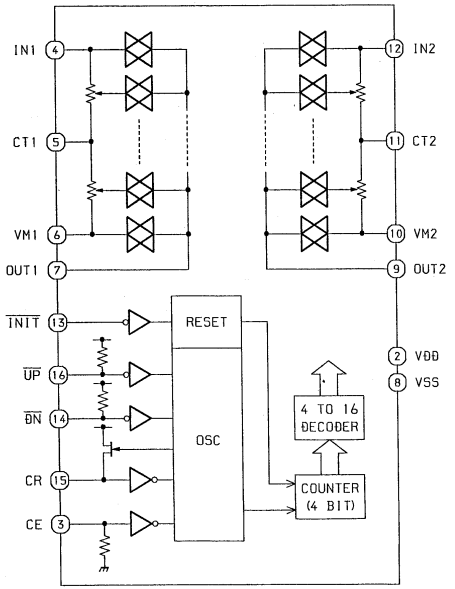
IC, BA3416BL



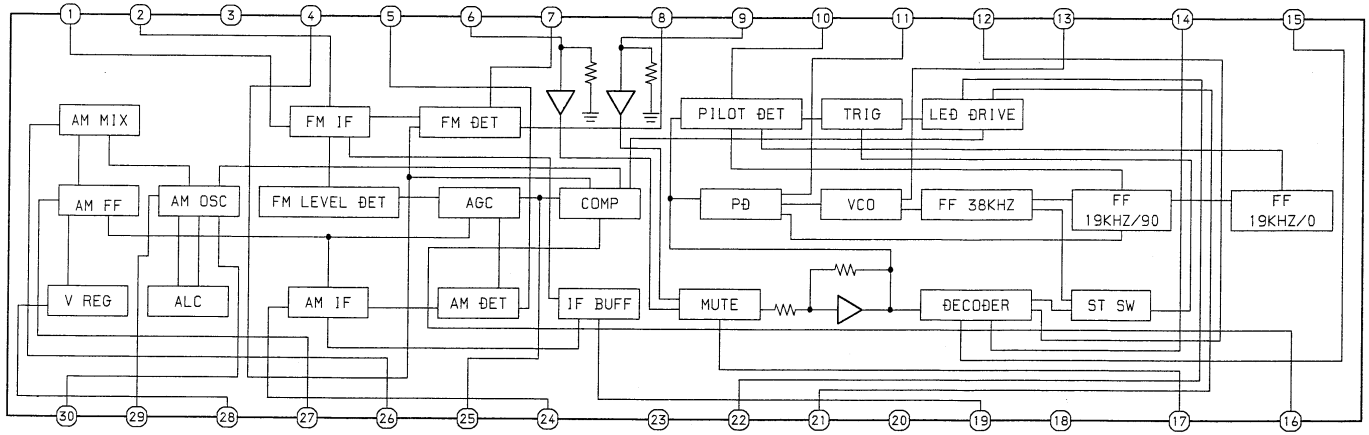
IC, BU2092



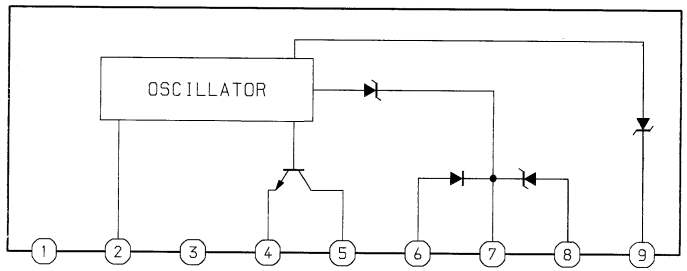
IC, LC7533



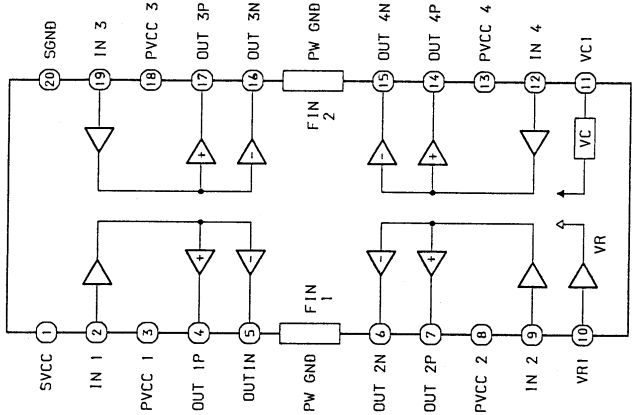
IC, LA1851N



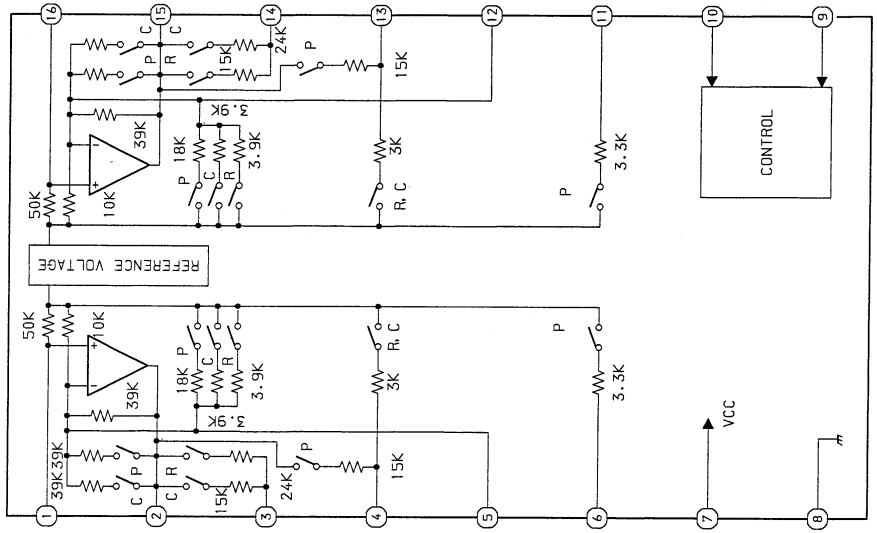
IC, TA8126S



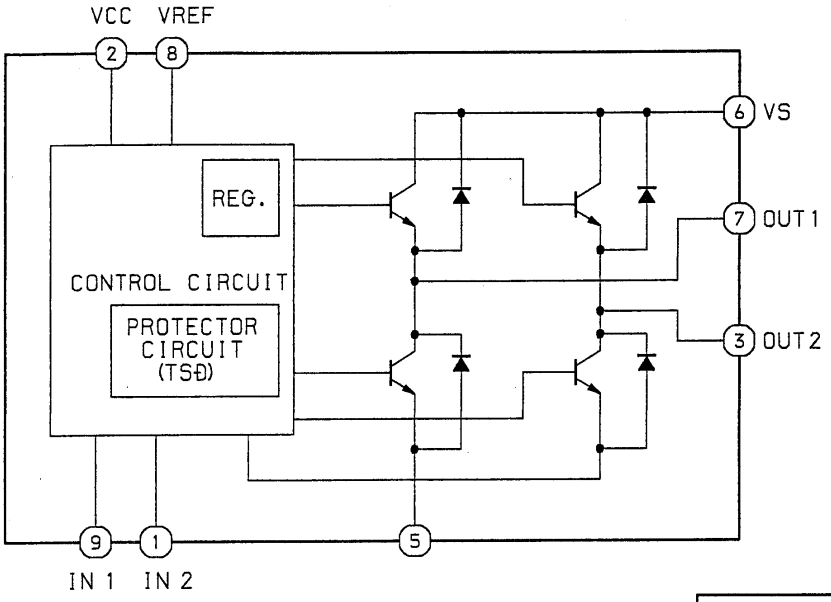
IC, TA2058F



IC, M62412P



IC, TA7291

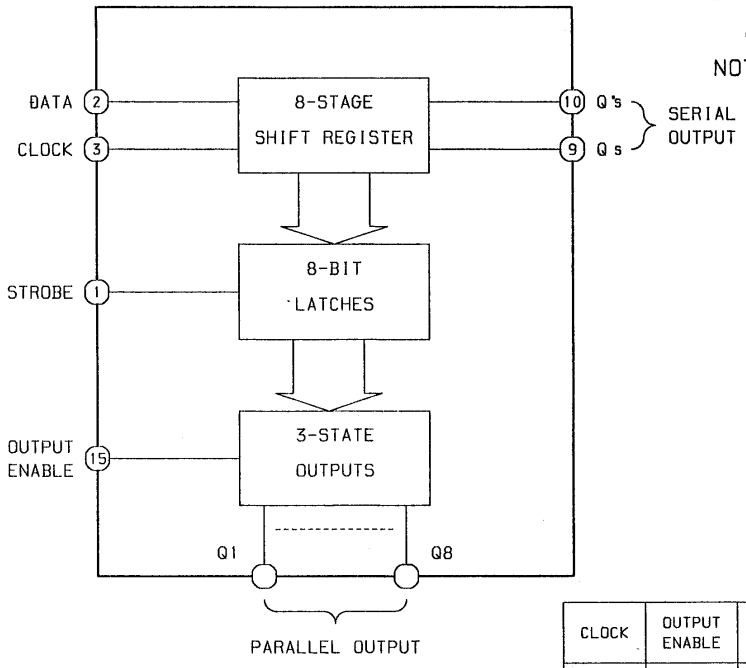


TRUTH TABLE

INPUT		OUTPUT		MODE
IN1	IN2	OUT1	OUT2	
0	0	∞	∞	STOP
1	0	H	L	CW
0	1	L	H	CCW
1	1	L	L	BRAKE

∞ : HI IMPEDANCE
NOTE : INPUT "H" ACTIVE

IC, BU4094B

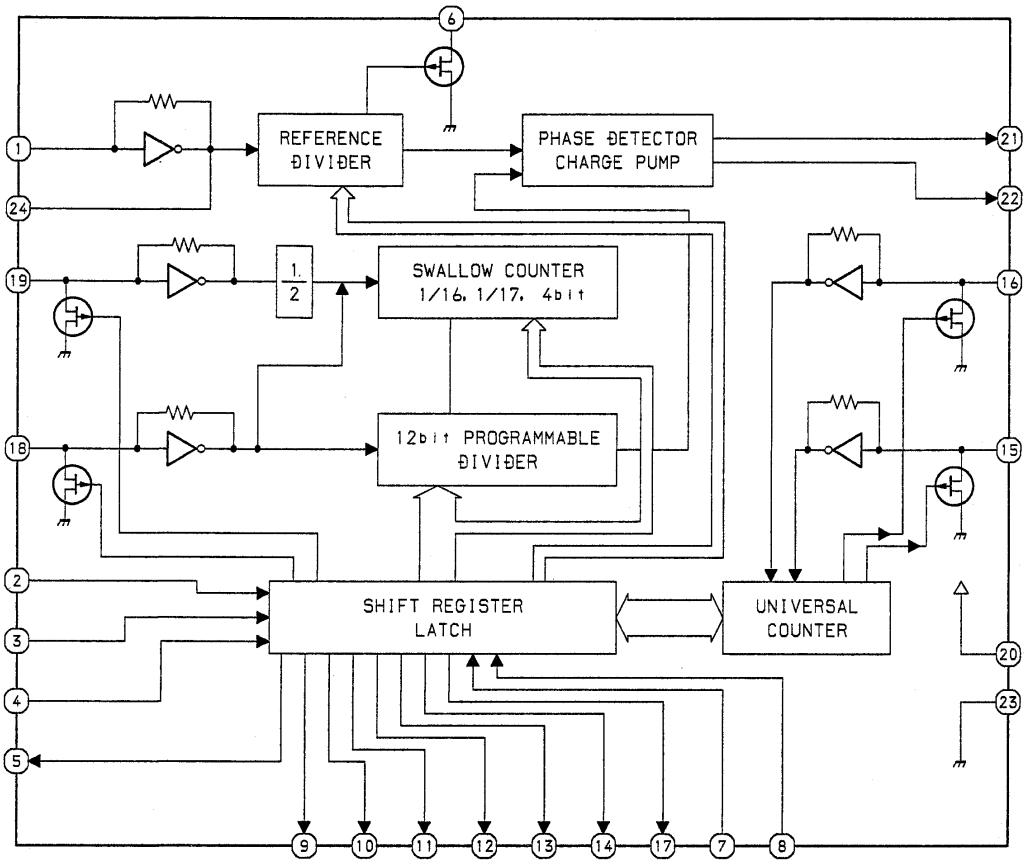


TRUTH TABLE

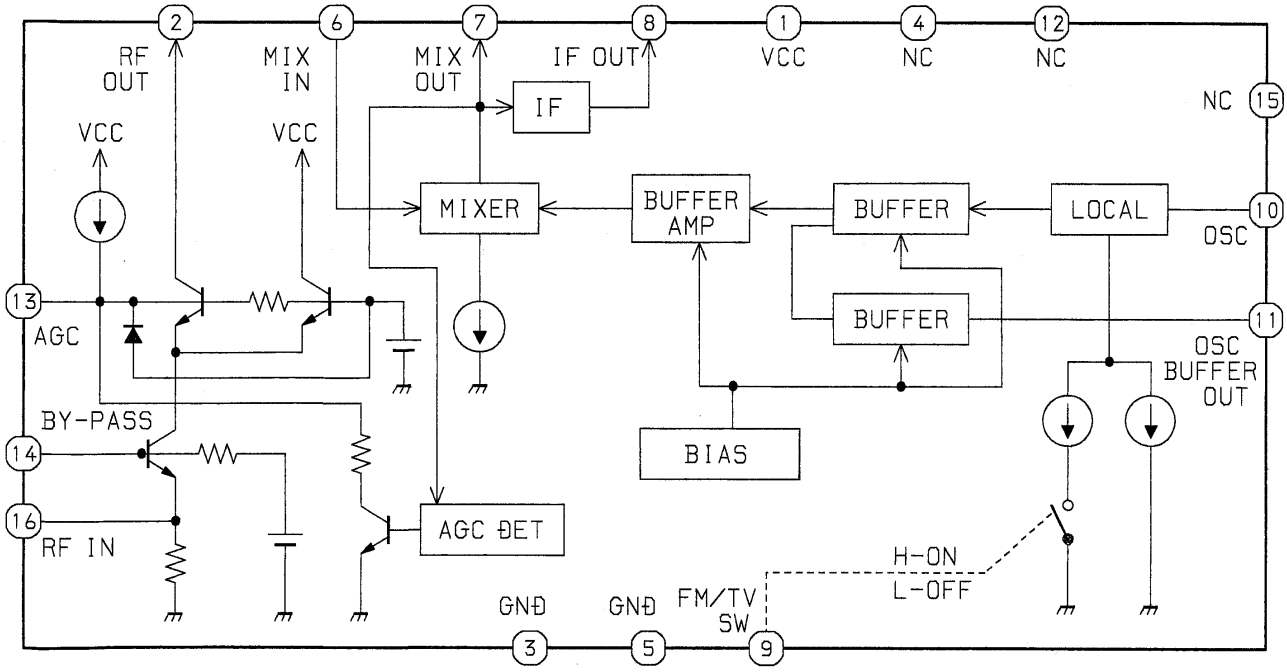
CLOCK	OUTPUT ENABLE	STROBE	DATA	PARALLEL OUTPUTS		SERIAL OUTPUTS	
				Q1	Qn	Qs	Q's
↑	L	X	X	Z	Z	Q7	NO Chg.
↓	L	X	X	Z	Z	No Chg.	Qs
↑	H	L	X	No Chg.	No Chg.	Q7	No Chg.
↑	H	H	L	L	Qn-1	Q7	No Chg.
↑	H	H	H	H	Qn-1	Q7	No Chg.
↓	H	X	X	No Chg.	No Chg.	No Chg.	Qs

Z=High Impedance
X=Don't Care

IC, LC7218



IC, TA8176SN



IC DESCRIPTION

IC, LC867116W-5844

Pin No.	Pin name	I/O	Description
1	O-DATA	O	PLL, shift register data output.
2	O-CLK	O	PLL, shift register clock output.
3	$\overline{\text{O-FSTB}}$	O	Shift register data latch strobe output.
4	O-MUTE	O	Main mute output.
5	O-PCONT	O	Machine power supply control output.
6	I-TUDO	I	PLL IC tuner data input.
7	$\overline{\text{I-RST}}$	I	Microprocessor reset..
8	XT1	I	Connected to 32.768 kHz crystal.
9	XT2	O	Connected to 32.768 kHz crystal.
10	VSS1	—	GND.
11	CF1	I	Connected to 6 MHz ceramic lock.
12	CF2	O	Connected to 6 MHz ceramic lock.
13	VDD1	—	Microprocessor power supply (5 V).
14	I-KEY0	I	Key A/D input.
15	I-KEY1	I	Key A/D input.
16	I-TRY SW	I	CD tray open/close switch A/D input.
17	I-PU-INNER	I	CD inside limit switch input.
18	—	I	N.C.
19	I-MO/$\overline{\text{ST}}$	I	Tuner · stereo detection.
20	I-MICLEV	I	Microphone level detection.
21	I-$\overline{\text{REC}}$	I	N.C.
22	$\overline{\text{O-T-BASS}}$	O	T-bass circuit ON/OFF switch output (ON: L).
23	O-CDSW	O	CD block power supply control output (ON: H).
24	O-INIT	O	Initial setting output.
25	$\overline{\text{O-HSP}}$	O	High speed dubbing selector output (ON: L).
26	I-HOLD	I	Hold backup mode at "H".
27	—	I	N.C.
28	I-RMT	I	Remote control input.
29	PAO	I	Initial setting input.
30	S1	O	LCD segment output.
31～40	S2～S11	O	LCD segment output and initial setting output at the same time.
41	VDD3	—	Microprocessor power supply.
42	VSS3	—	GND.
43	S12	O	LCD segment output.
44	S13	O	LCD segment output.
45～60	S16～31	O	LCD segment output.
61	V3	—	LCD drive bias power supply.
62	V2	—	LCD drive bias power supply.
63	V1	—	LCD drive bias power supply.
64	COM0	O	LCD common output.
65	COM1	O	LCD common output.

Pin No.	Pin name	I/O	Description
66	COM2	O	LCD common output.
67	COM3	O	N.C.
68	VSS2	—	GND.
69	VDD2	—	CD IC control data bus input/output.
70	I/O BUS0	I/O	CD IC control data bus input/output.
71	I/O BUS1	I/O	CD IC control data bus input/output.
72	I/O BUS2	I/O	CD IC control data bus input/output.
73	I/O BUS3	I/O	CD IC control data bus input/output.
74	$\overline{\text{O-CCE}}$	O	CD IC control chip enable output.
75	O-BUCK	O	CD IC control data bus clock output.
76	O-CDMUTE	O	CD mute output.
77	O-CLOSE	O	CD tray close output (Close ON: H).
78	O-OPEN	O	CD tray open output (Close ON: H).
79	O-CE	O	PLL chip enable output.
80	O-MSTB	O	Shift register (MAIN C.B.) data latch strobe output.

IC, TC9284AF

Pin No.	Pin Name	I/O	Description
1	GNDA	—	D/A converter R-channel analog GND
2	RO	O	R-channel data positive output
3	$\overline{RO}$	O	R-channel data inverted output
4	VDA	—	D/A converter power supply (+5 V)
5	$\overline{LO}$	O	L-channel data inverted output
6	LO	O	L-channel data positive output
7	GNDA	—	D/A converter L-channel analog GND
8～10	$\overline{TEST3}$～$\overline{TEST5}$	I	TEST pin. Normally "H" (+5 V)
11	SBOK	O	Sub code data CRCC judgment result output. Judgment result OK: H (Not used)
12	VDDD	—	Digital power supply (+5 V)
13	GNDD	—	Digital GND
14～17	BUS0～BUS3	I/O	µprocessor interface, data input/output
18	CCE	I	µprocessor interface, chip enable signal input. When "L" : BUS 3～0 are active
19	BUCK	I	µprocessor interface, clock input
20	PFCK	O	PB frame sync output
21	$\overline{RST}$	I	Reset signal input. "L" at reset
22	SUBSYC	O	Sub code block sync output. When sub code is detected, "H" at S1 position
23	SUBD	O	Sub code P～W output
24	CLCK	I	Sub code P～W data read clock input
25	VDDD	—	Digital power supply (+5 V)
26	GNDD	—	Digital GND
27	DFCT	O	Defect detection signal output. When defect is detected: "VREF" , or "HiZ"
28	TEL2	O	Tracking gain adjustment analog switch output. "VREF" , or "HiZ"
29	TEL1	O	Tracking gain adjustment analog switch output. "VREF" , or "HiZ"
30	TGUL	O	Analog switch output for tracking servo gain up. Polarity in gain-up mode and normal mode can be selected by command
31	TGUH2	O	Analog switch output for tracking servo gain up. "HiZ" for gain-up, normally "VREF" . TGUH1 during normal playback. TGUH2: not used
32	TUGH1	O	
33	TKIC	O	Tracking actuator kick signal output. NKICx and CKICx are used for kick during tracking gain adjustment. "2VREF" for outermost track. "O" for moving toward inner track. Normally "HiZ"
34	FMON	O	Analog switch output to turn ON/OFF the feed servo "HiZ" to turn ON servo. "VREF" to turn OFF servo
35	$\overline{TEST1}$	I	TEST pin. Normally "H" (Connected to +5 V)
36	FMFB	O	Feed motor FWD/BWD direction control signal output. "2VREF" for outmost track. "O" for moving toward inner track. Normally "HiZ"
37	$\overline{TEST}$	I	TEST pin. Normally "H" or open (Connected to +5 V)
38	DMON	O	Analog switch output to select gain of the disc motor drive circuit. "HiZ" for CLV servo OFF, "HiZ" or "VREF" can be selected by command

<table>
<tr><th>Pin No.</th><th>Pin Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>39</td><td>DMFC</td><td>O</td><td>Disc motor CLV servo AFC signal output
<table>
<tr><th>Operation</th><th>Command</th><th>DMFC output</th></tr>
<tr><td>Motor acceleration</td><td>DMFK</td><td>“2VREF”</td></tr>
<tr><td>CLV servo ON</td><td>DMSV</td><td>AFC signal (PWM)</td></tr>
<tr><td>Motor brake</td><td>DMBK</td><td>“L”</td></tr>
<tr><td>CLV servo OFF</td><td>DMOFF</td><td>“VREF”</td></tr>
</table></td></tr>
<tr><td>40</td><td>DMPC</td><td>O</td><td>Disc motor CLV servo APC signal output</td></tr>
<tr><td>41</td><td>2VREF</td><td>—</td><td>Analog power supply (twice the “VREF” voltage)</td></tr>
<tr><td>42</td><td>SEL</td><td>O</td><td>Servo mode select output. It turns ON/OFF the laser diode (LD) and focus servo.
<table>
<tr><th>SEL output</th><th>LD</th><th>Focus servo</th><th>Operating mode</th></tr>
<tr><td>“L”</td><td>OFF</td><td>OFF</td><td>LD OFF</td></tr>
<tr><td>“HiZ”</td><td>ON</td><td>OFF</td><td>Focus search</td></tr>
<tr><td>“H”</td><td>ON</td><td>ON</td><td>Focus ON
(normal play)</td></tr>
</table></td></tr>
<tr><td>43</td><td>FCSI</td><td>O</td><td>Focus actuator drive signal output during focus search mode. “VDDA” to move the lens far from disc. “L” to move the lens closer to disc. Normally “HiZ”</td></tr>
<tr><td>44</td><td>FKIC</td><td>O</td><td>Focus actuator drive signal output during focus adjustment mode. “VDDA” to move the lens far from disc. “L” to move the lens closer to disc. Normally “HiZ” (Not used)</td></tr>
<tr><td>45, 46</td><td>FEL1, FEL2</td><td>O</td><td>Focus gain adjustment analog switch output. “VREF” or “HiZ” (Not used)</td></tr>
<tr><td>47</td><td>FEI</td><td>I</td><td>Focus error signal input</td></tr>
<tr><td>48</td><td>TESH</td><td>I</td><td>Analog switch input to track error signal sample-and-hold</td></tr>
<tr><td>49</td><td>TEOF</td><td>O</td><td>Focus gain adjustment analog switch output. “VREF” or “HiZ”</td></tr>
<tr><td>50</td><td>SBAD</td><td>I</td><td>Sub beam added signal input</td></tr>
<tr><td>51</td><td>RFRP</td><td>I</td><td>RF ripple signal input</td></tr>
<tr><td>52</td><td>VREF</td><td>—</td><td>Analog power supply</td></tr>
<tr><td>53</td><td>RFI</td><td>I</td><td>RF signal input</td></tr>
<tr><td>54</td><td>GNDA</td><td>—</td><td>Analog GND</td></tr>
<tr><td>55</td><td>DTSC 2</td><td>O</td><td>Data slice control EFM signal inverted output</td></tr>
<tr><td>56</td><td>MONI T</td><td>O</td><td>Internal signal monitored output. EFMO, PLCK or LOCK signals can be selected by command. Can be muted (Not used)</td></tr>
<tr><td>57</td><td>DTSC 1</td><td>O</td><td>Data slice control EFM signal positive polarity output</td></tr>
<tr><td>58</td><td>VDDA</td><td>—</td><td>Analog power supply (+5 V)</td></tr>
<tr><td>59</td><td>PDCNT</td><td>I</td><td>PDO output control signal input. “L” to fix to “HiZ” forcibly. “H” : normal output (Connected to +5 V)</td></tr>
<tr><td>60</td><td>PDO</td><td>O</td><td>Phase error signal between EFM and PLCK signals is output</td></tr>
<tr><td>61</td><td>TMAX</td><td>O</td><td>TMAX detected result output
<table>
<tr><th>TMAX detected result</th><th>TMAX output</th></tr>
<tr><td>Longer than specified cycle</td><td>“L”</td></tr>
<tr><td>Shorter than specified cycle</td><td>“2VREF”</td></tr>
<tr><td>Within specified cycle</td><td>“HiZ”</td></tr>
</table></td></tr>
</table>

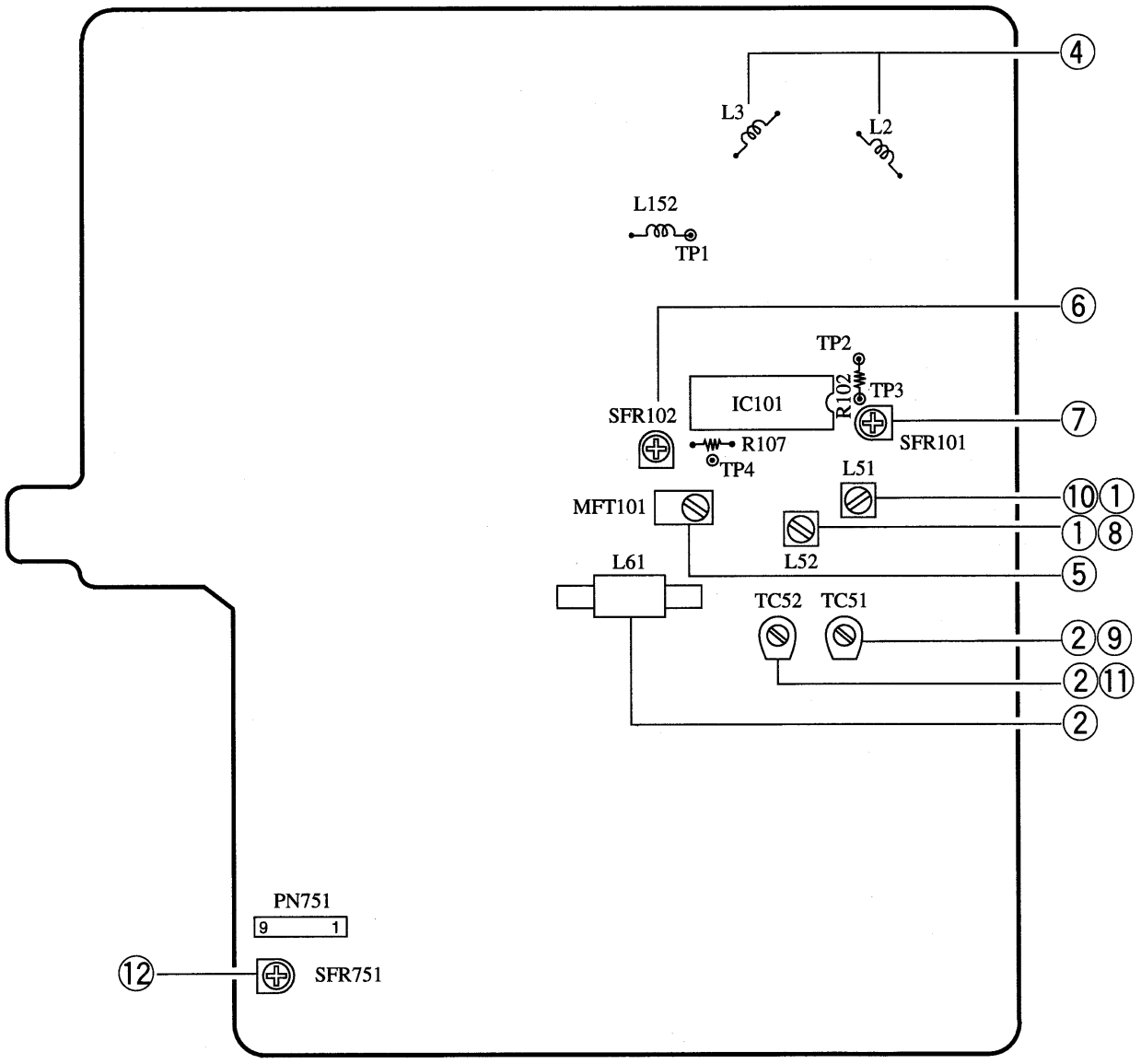
Pin No.	Pin Name	I/O	Description
62	LPFN	I	Low-pass filter amplifier inverted input
63	LPFO	O	Low-pass filter amplifier output
64	VCOF	O	VCO filter output
65	TESTX	I	TEST pin. Normally "H" or "L" (Connected to +5 V)
66	$\overline{HS}$	O	Double speed mode output. "H" : normal speed. "L" : double speed (Not used)
67	GNDD	—	Digital GND
68	SPDA	O	Processor status signal output (Not used)
69	COFS	O	Correction circuit frame clock (7.35 kHz) output (Not used)
70	WDCK	O	Word clock (88.2 kHz) output. SUBQ, BUF0V or 1PF can be selected by the µprocessor command (Not used)
71	CHCK	O	Channel clock (44.1 kHz) output. "L" for L-channel. "H" for R-channel (Not used)
72	BCK	O	Bit clock (1.4112 MHz) output (Not used)
73	AOUT	O	Audio data output (Not used)
74	EMPH	O	Emphasis ON/OFF select signal. "H" : emphasis ON. "L" for emphasis OFF (Not used)
75	DOUT	O	DIGITAL SIGNAL output
76	$\overline{TEST2}$	I	TEST pin. Normally "H" (Connected to +5 V)
77	VDDX	—	Crystal oscillator circuit power supply (+5 V)
78	XI	I	External crystal oscillator is connected. (Crystal oscillator frequency 16.9344 MHz)
79	XO	O	External crystal oscillator is connected. (Crystal oscillator frequency 16.9344 MHz)
80	GNDX	—	Crystal oscillator GND

IC, TA2065F

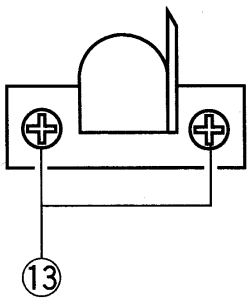
Pin No.	Pin name	I/O	Description
1	RFO	O	RF amp (RF AMP) output terminal.
2	RFI	I	RF ripple signal generating circuit input terminal.
3	VRO	O	VR amp output terminal.
4	2VRO	O	2VR amp output terminal.
5	RFRP	O	RF ripple signal output terminal.
6	SBAD	O	Defects detection signal output terminal.
7	DFIN	I	Defect detecting comparator positive phase input terminal.
8	FEP	I	Focus error balance adjusting input terminal.
9	FEN	I	Focus error amp (FE AMP) negative phase input terminal.
10	FEO	O	Focus error amp (FE AMP) output terminal.
11	FEI	I	Focus output amp (FS AMP) positive phase input terminal.
12	FHLD	I	Hold switch terminal for defect.
13	FEL1	I	Focus gain adjusting terminal.
14	FEL2	I	Focus gain adjusting terminal.
15	FSN	I	Focus output amp (FS AMP) negative phase input terminal.
16	FSO	O	Focus output amp (FS AMP) output terminal.
17	COSC	O	Focus search signal generating capacitor connecting terminal.
18	OSCI	I	Focus search signal generating built-in current source control input terminal.
19	GND	—	Ground terminal.
20	VCC	—	Power source terminal.
21	SEL	I	Analog switch control signal input terminal.
22	DMEP	I	Disc motor amp (DM AMP) positive phase input terminal.
23	DMEN	I	Disc motor amp (DM AMP) negative phase input terminal.
24	DMEO	O	Disc motor amp (DM AMP) output terminal.
25	DFCT	I	Defect detecting comparator negative phase input terminal.
26	FMSO	O	Feed motor output amp (FMS AMP) output terminal.
27	FMSN	I	Feed motor output amp (FMS AMP) negative phase input terminal.
28	FMSP	I	Feed motor output amp (FMS AMP) positive phase input terminal.
29	THLD	I	Hold switch terminal for defect.
30	TS2O	O	Tracking servo amp 2 (TS2 AMP) output terminal.
31	TS2N	I	Tracking servo amp 2 (TS2 AMP) negative phase input terminal.
32	TS2P	I	Tracking servo amp 2 (TS2 AMP) positive phase input terminal.
33	TS1N	I	Tracking servo amp 1 (TS1 AMP) negative phase input terminal.
34	TS1P	I	Tracking servo amp 1 (TS1 AMP) positive phase input terminal.
35	TSO	O	Tracking output amp (TS AMP) output terminal.
36	TEL1	I	Tracking gain adjusting terminal.
37	TEL2	I	Tracking gain adjusting terminal.
38	TSN	I	Tracking output amp (TS AMP) negative phase input terminal.
39	TPO	O	Sub-beam I-V amp output terminal.
40	TPI	I	Sub-beam I-V amp input terminal.
41	TNI	I	Sub-beam I-V amp input terminal.

Pin No.	Pin name	I/O	Description
42	TNO	O	Sub-beam I-V amp output terminal.
43	FNI	I	Main-beam I-V amp input terminal.
44	FPI	I	Main-beam I-V amp input terminal.
45	LDO	O	Laser diode amp output terminal.
46	MDI	I	Monitor photo diode amp input terminal.
47	RFN	I	RF amp negative phase input terminal.
48	RFT	I	RF amp peaking terminal.

A MAIN C.B



RPH (DECK1) / PH (DECK2)



TUNER SECTION

1. MW VT Adjustment
   Settings: • Test point: TP1
   • Adjustment location: L51 (HR), L52 (K, G, EZ, EEZ)
   Method: Set to MW 531kHz adjust L51 (HR), L52 (K, G, EZ, EEZ) so that the test point becomes 1.3V±0.05V.

2. MW Tracking Adjustment
   TC51 (K, G, EZ, EEZ)
   TC52 (HR) 603kHz
   L61 ..... 1404kHz

3. FM VT Check
   Settings: • Test point: TP1
   Method: Set to FM 87.5MHz and check that the test point is 4.0±0.1V.

4. FM Tracking Adjustment
   L2, 3 ..... 87.5MHz

5. DC Balance/MONO Distortion Adjustment
   Settings: • Test point: TP2, TP3
   • Adjustment location: MFT101
   • Input level: 54dB
   Method: Set to FM 98.0MHz and adjust MFT101 so that the voltage between TP2 and TP3 becomes 0V±10mV.

6. MW tuning Adjustment
   Settings: • Adjustment location: SFR102
   Method: Make setup for MW 603kHz. Adjust SFR102 so that the machine performs Auto Stop when 53±2dB is input.

   * Confirm that TP4 is "L" at this time.

7. FM tuning Adjustment
   Settings: • Adjustment location: SFR101
   Method: Make setup for FM 87.5MHz. Adjust SFR101 so that the machine performs Auto Stop when 32±5dB is input.

   * Confirm that TP4 is "L" at this time.

8. SW VT Adjustment (HR ONLY)
   Settings: • Test point: TP1
   • Adjustment location: L52
   Method: Set to SW 3.8MHz adjust L52 so that the test point becomes 1.4V ± 0.05V.

9. SW Tracking Adjustment (HR ONLY)
   TC51 ..... 12.5MHz

10. LW VT Adjustment (K, G, EZ, EEZ ONLY)
    Settings: • Test point: TP1
    • Adjustment location: L51
    Method: Set to LW 153kHz adjust L51 so that the test point becomes 2.0V ± 0.05V.

11. LW Tracking Adjustment (K, G, EZ, EEZ ONLY)
    TC52 ..... 288kHz

TAPE SECTION

12. Tape speed Adjustment (DECK2)
    Settings: • Test tape: TTA-100 (TTA-111S)
    • Adjustment location: SFR751
    Method: Play back the test tape with DECK1 and adjust SFR751 so that the output frequency is 3000Hz. After the adjustment, check that the frequency of DECK2 is 3000±55Hz.

13. Azimuth Adjustment (DECK1, DECK2)
    Settings: • Test tape: TTA-320
    • Adjustment location: Head azimuth adjustment screw
    Method: Play back the 8kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on each FWD PLAY and REV PLAY mode.

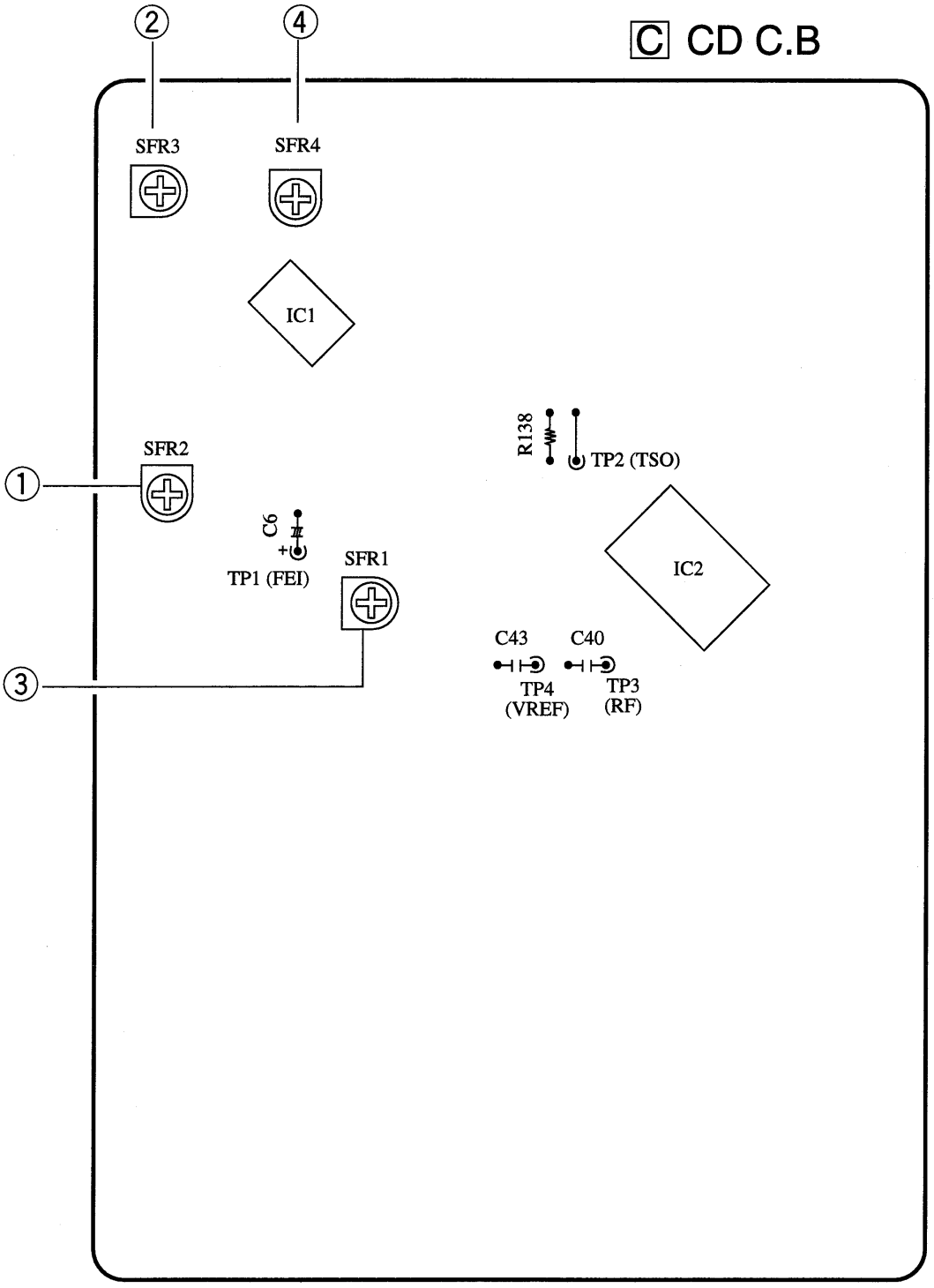
PRACTICAL SERVICE FIGURE

<RADIO SECTION>

Intermediate frequency:	FM 10.7MHz
	AM 450kHz
FM stereo separation:	27±3dB (98MHz)

<TAPE RECORDER SECTION>

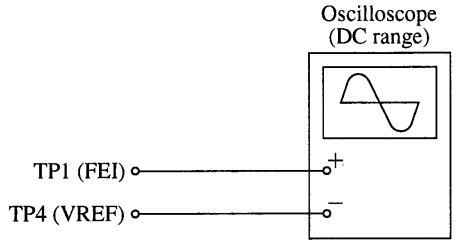
Recording bias frequency:	71.5±0.5kHz
Erasing ratio (W/FILTER):	50dB
Distortion (T, H, D 10%):	Less than 4.8% (PB)
S/N ratio:	40dB (AC/DC, PB)
	35dB (AC/DC, REC/PB)
Noise (PB):	Less than 1mV (AC/DC, MIN)
Tape speed:	3000±$\frac{3}{2}$Hz
Wow & flutter:	0.35% (JIS, UN WTD)
Take-up torque:	40～70g-cm
F.F & REW torque:	Less than 50g-cm


C CD C.B
2
4
SFR3
SFR4
IC1
SFR2
1
C6
TP1 (FEI)
SFR1
3
R138
TP2 (TSO)
IC2
C43
C40
TP4
(VREF)
TP3
(RF)

(CD SECTION)

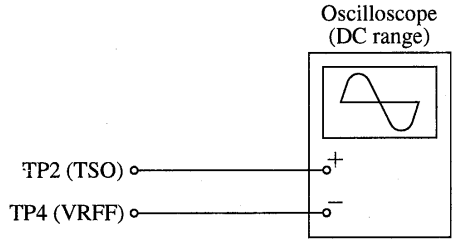
Note: · Connect a probe (10: 1) of the oscilloscope to a test point.

1. Focus offset Adjustment



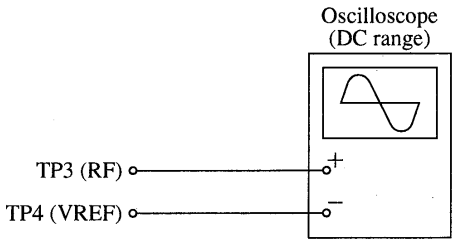
① Make short-circuit between TP3 (RF) and TP4 (VREF) by wire.
② Connect an oscilloscope between test points TP1 (FEI) and TP4 (VREF).
③ Turn on the main power to the CD player.
④ Insert the test disc TCD-782 (YEDS-18) and reads the TOC data.
⑤ Adjust SFR2 so that the offset level is 0±10mV.
⑥ Remove short-circuit after completing adjustment.

2. Tracking offset Adjustment

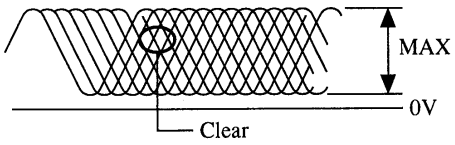


① Make short-circuit between TP3 (RF) and TP4 (VREF) by wire.
② Connect an oscilloscope between test points TP2 (TSO) and TP4 (VREF).
③ Turn on the main power to the CD player.
④ Insert the test disc TCD-782 and reads the TOC data.
⑤ Adjust SFR3 so that the offset level is -10±10mV.
⑥ Remove short-circuit after completing adjustment.

3. Focus Balance Adjustment
Make the focus bias adjustment when replacing and repairing the optical block.

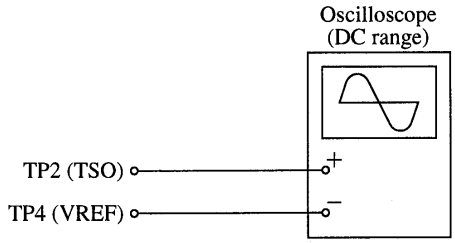


① Connect an oscilloscope to test points TP3 (RF) and TP4 (VREF).
② Turn on the power switch.
③ Insert test disc TCD-782 (YEDS-18) and play back the second composition.
④ Adjust SFR1 so that the level of RF wave to be maximum and clear.

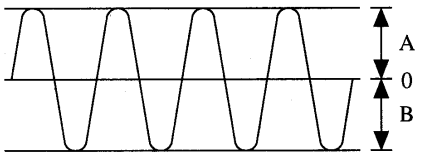


VOLT/DIV: 20mV
TIME/DIV: 0.2μS

4. Tracking Balance Adjustment

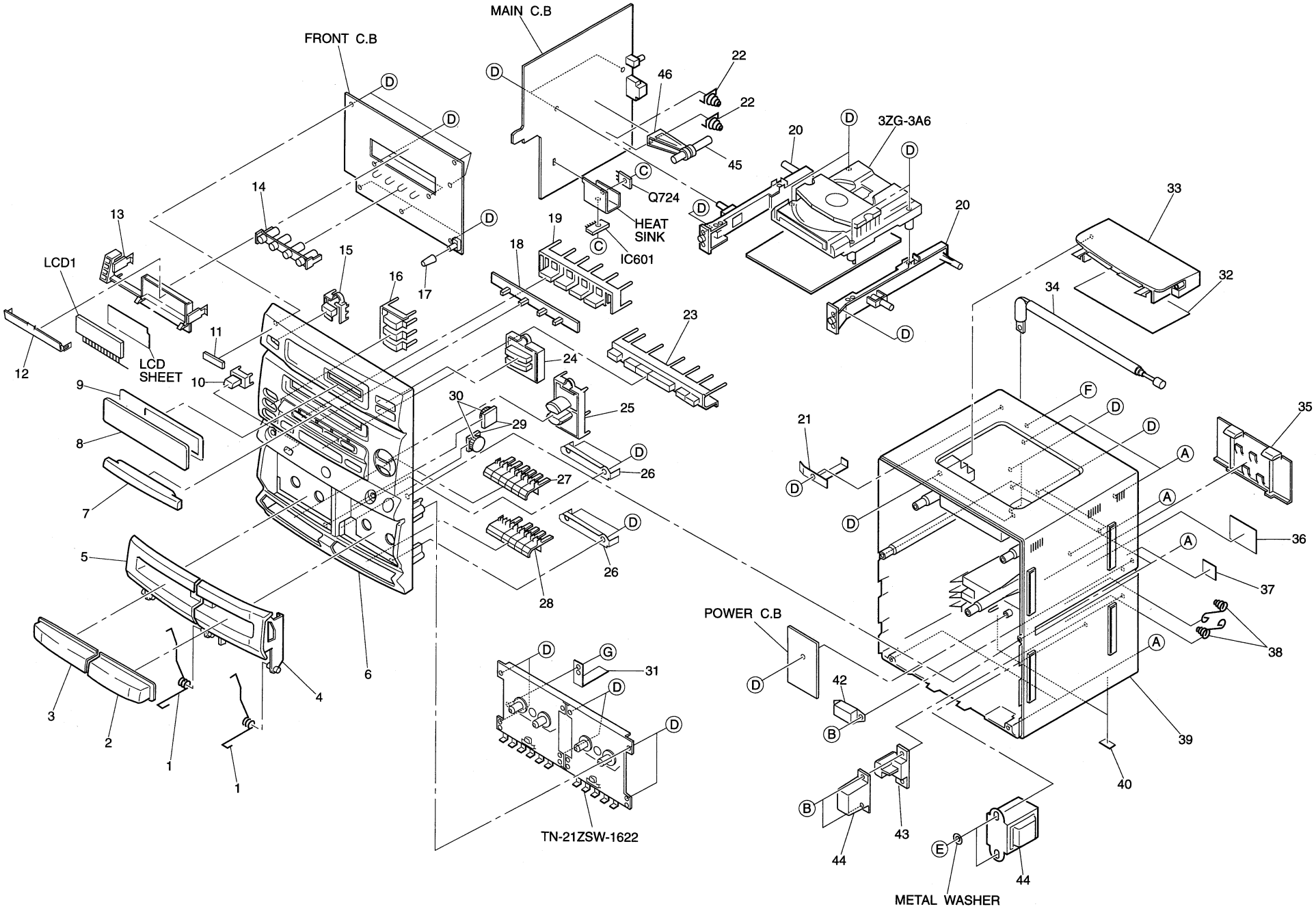


① Connect an oscilloscope to test points TP2 (TSO) and TP4 (VREF).
② Turn on the power switch.
③ Insert test disc TCD-782 (YEDS-18) and press the PLAY (▶) button.
④ Push and hold the ⏭ button. (MS mode)
⑤ Adjust SFR4 so that the waveform on the oscilloscope is vertically symmetrical as shown in the figure below.



A = B

MECHANICAL EXPLODED VIEW 1 ／ 1

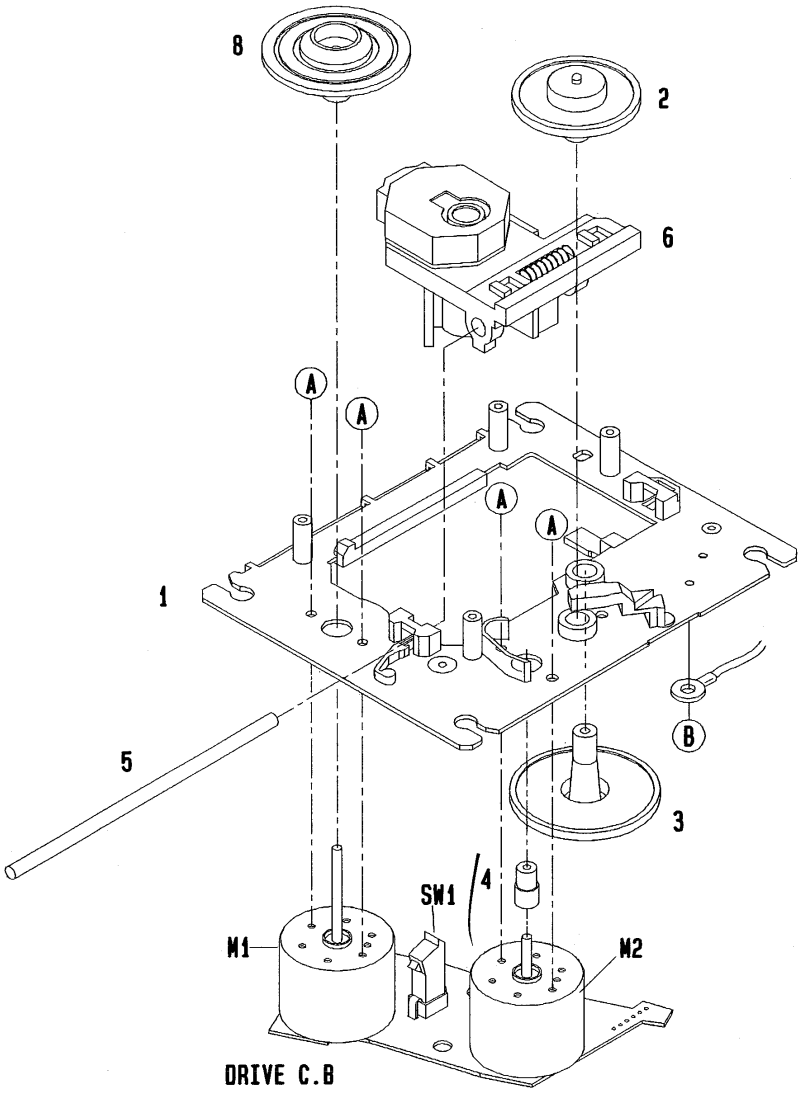


MECHANICAL PARTS LIST 1 ／ 1

DESCRIPTION で判断できない物は “REFERENCE NAME LIST” を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO.	PART NO.	カンリ NO.	DESCRIPTION
1	S7-738-390-000		SPR,CASS
2	S7-738-090-000		LENS,CASS(R)
3	S7-738-080-000		LENS,CASS(L)
4	S7-738-040-100		DOOR,CASS(R)
5	S7-738-030-100		DOOR,CASS(L)
6	S7-738-010-100		PANEL,FRONT
7	S7-738-060-100		DOOR,CD
8	S7-738-100-100		LENS,LCD
9	S7-538-A30-010		LENS,FILTER
10	S7-738-210-000		KNOB,HI-DUBBING(BLK)
11	S7-538-120-000		BADGE AIWA
12	S7-738-280-000		COVER,LED
13	S7-738-270-000		HOLDER,LCD(WIT)
14	S7-738-290-000		GUIDE,FUNCTION-LED
15	S7-738-180-000		KNOB,POWER(BLK)
16	S7-738-190-100		KNOB,EQ
17	S7-738-130-000		KNOB,MIC(BLK)
18	S7-738-220-000		LENS,FUNCTION
19	S7-738-150-100		KNOB,FUNCTION
20	S7-738-260-000		CHASSIS CD(BLK)
21	S7-738-370-000		HOLDER ANT
22	S7-738-420-000		SPR,BAT(B)
23	S7-738-140-100		KNOB,CONTINUE
24	S7-738-160-000		KNOB,CD(BLK)
25	S7-738-170-000		KNOB,VOL(BLK)
26	S7-738-360-000		HOLDER KNOB CASS
27	S7-738-110-100		KNOB,CASS(L)
28	S7-738-120-100		KNOB,CASS(R)
29	S7-538-270-000		BRACKET,GEAR
30	S7-538-280-000		GEAR
31	S7-738-380-000		PLATE REC
32	S7-738-490-000		PLATE,TOP(BLK)
33	S7-738-050-000		PANEL,TOP(D-GRY)
34	S0-172-380-000		ROD ANTENNA
35	S7-738-070-000		DOOR,BAT(D-GRY)
36	S7-738-250-000		PLATE CD-G 0.3MM
37	S7-738-240-000		PLATE VOLTAGE<EXCEPT HR>
38	S7-738-400-000		SPR,BAT(A)
39	S7-738-020-000		CAB,BACK
40	S7-738-470-000		FOOT,RUBBER
41	S2-838-070-000		AC SOCKET COVER BLK
42	S1-200-000-030		SW,SLIDE SS12J01M-A-65<HR>
43	S2-201-000-050		SOCKET,AC MKJ-102
44	S4-840-041-400		PT,TF EI-57(EE,K)<EXCEPT HR>
44	S4-540-041-300		PT,TF EI-57/30<HR>
45	S0-101-000-000		FERRI,BAR 10-100MM (LW)<K,G>
46	S7-738-580-000		HOLDER,BAR<K,G>
A	87-751-104-410		VT2+3-30
B	87-343-075-210		VT2+2.6-10
C	87-741-095-410		VT2+3-8(BLK)
D	87-741-097-410		VT2+3-12
E	87-743-103-410		SCREW,ST3-25
F	87-761-100-410		VFT2+3-16(BLK)
	87-081-438-010		FW,3-6-0.4<HR,K>

CD MECHANISM EXPLODED VIEW 1 ／ 2

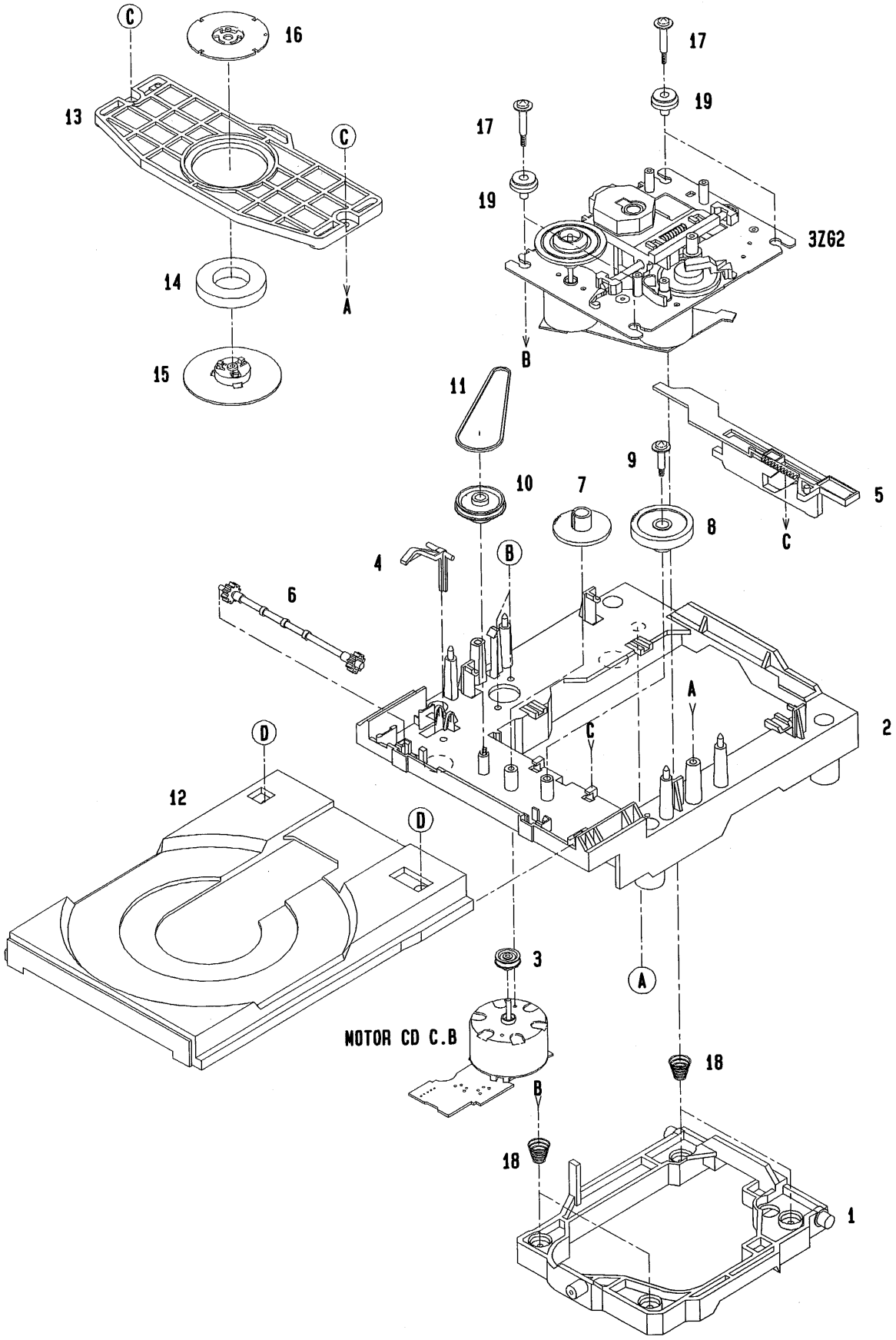


CD MECHANISM PARTS LIST 1 ／ 2

DESCRIPTION で判断できない物は “REFERENCE NAME LIST” を参照してください。
If can't understahd for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO.	PART NO.	カンリ NO.	DESCRIPTION
1	83-ZG2-202-51K		O-SERT S ASSY,S
2	83-ZG2-204-419		GEAR,A
3	83-ZG2-205-219		GEAR,B
4	83-ZG2-220-01K		GEAR MOTOR 2
5	83-ZG2-207-119		SHAFT,SLIDE
6	87-070-109-019		KSS 212A,PICKUP UNIT
8	83-ZG2-222-01K		TURN TABLE,A5
A	87-261-032-219		SCREW V+2-3
B	87-067-174-019		SCRE VTT+2-4

CD MECHANISM EXPLODED VIEW 2 / 2

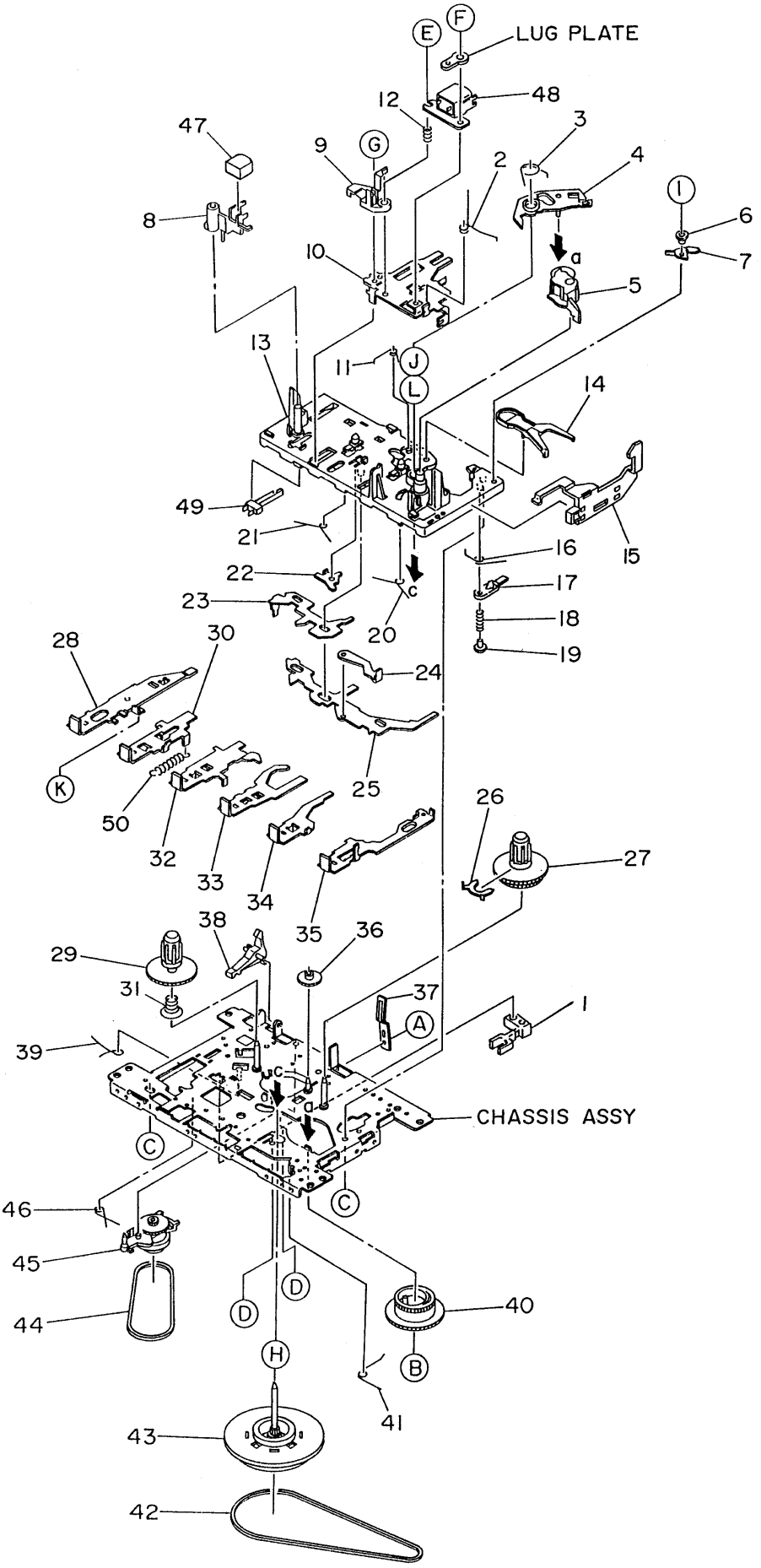


CD MECHANISM PARTS LIST 2／2

DESCRIPTIONで判断できない物は“REFERENCE NAME LIST”を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	カンリ NO.	DESCRIPTION
1	83-ZG3-202-01K		HLDR,MECH
2	83-ZG3-228-21K		CHAS,L6
3	83-ZG3-208-01K		PULLEY,MOTOR
4	83-ZG3-213-01K		LVR,SW
5	83-ZG3-209-01K		CAM,SLIDE
6	83-ZG3-207-01K		GEAR,TRAY
7	83-ZG3-204-01K		GEAR,C
8	83-ZG3-205-01K		GEAR,D
9	83-ZG3-217-019		S-SCREW,GEAR D
10	83-ZG3-220-11K		GEAR,PULLEY 2
11	83-ZG3-214-019		BELT,L
12	83-ZG3-203-61K		TRAY,CD
13	83-ZG3-210-01K		HLDR,CHUCK
14	83-ZG3-602-010		RING,MAG
15	83-ZG3-212-01K		CAP,DISC
16	83-ZG3-211-01K		PLATE,DISC
17	81-ZG1-254-019		S-SCEW,MECH HLDR
18	83-ZG3-216-019		SPR-C,L
19	83-ZG3-215-019		CUSH-G,MAIN
A	87-067-945-119		VFT2+3-12(F10)
B	87-251-071-119		U+2.6-4
C	87-512-074-219		VFT2+2.6-8
D	87-352-075-219		VT2+2.6-10

TAPE MECHANISM EXPLODED VIEW 1 / 2

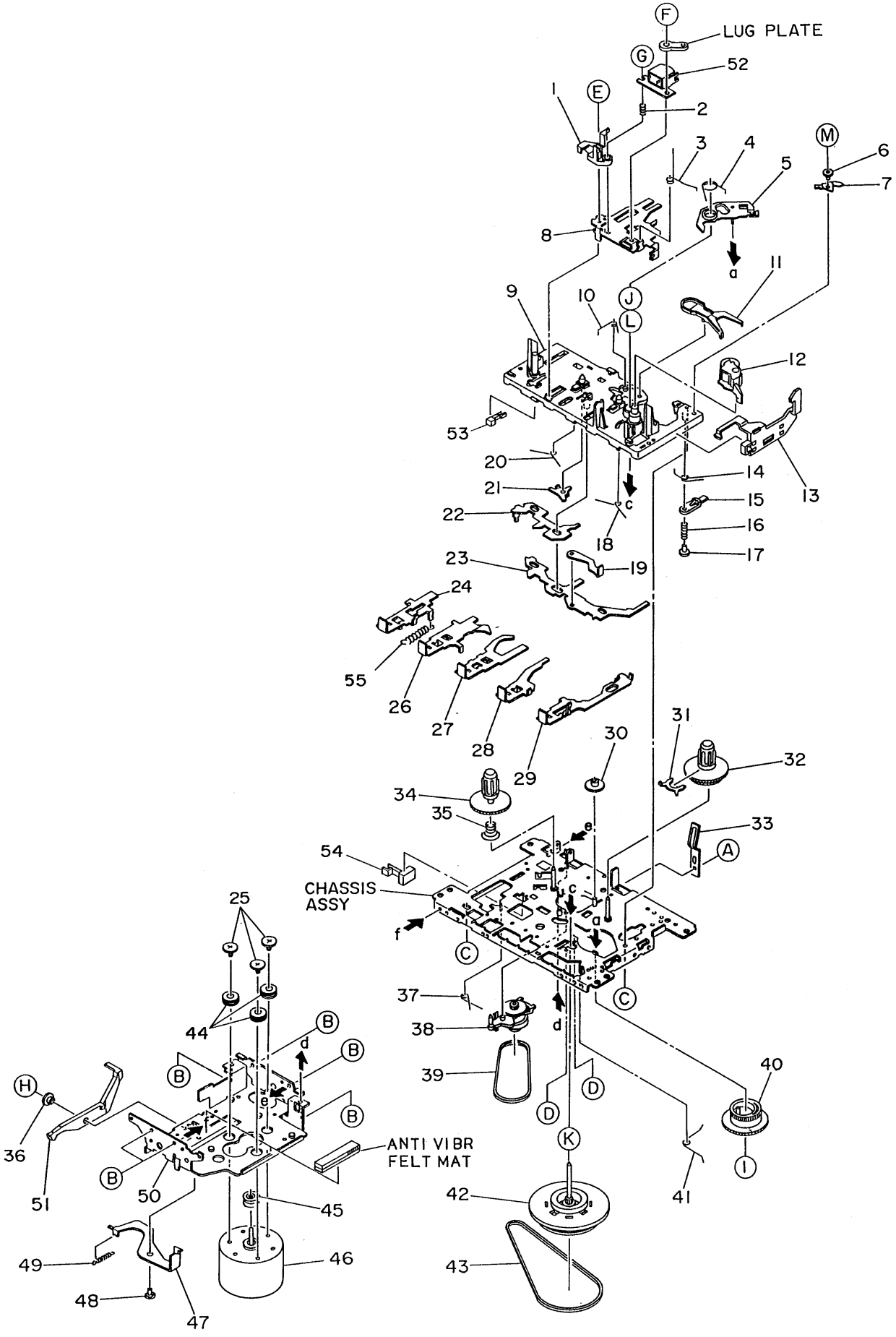


TAPE MECHANISM PARTS LIST 1 ／ 2

DESCRIPTIONで判断できない物は “REFERENCE NAME LIST” を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO.	PART NO.	カンリ NO.	DESCRIPTION
1	S6-401-011-610		LEAF SW MSW-17820MVEI
2	S1-921-030-030		PANEL P SPRING
3	S1-921-260-050		GEAR PLATE SPRING
4	S1-921-265-020		GEAR PLATE ASSY
5	S1-921-043-090		PINCH ROLLER ARM ASY
6	S1-921-140-370		P ARM COLLER
7	S1-921-140-340		P ARM
8	S1-921-030-050		MG ARM
9	S1-921-030-4A0		HEAD BASE
10	S1-921-030-110		HEAD PANEL
11	S1-921-141-8A0		M CONTROL SPRING
12	S1-821-030-070		AZIMUTH SPRING
13	S1-921-143-010		BASE ASSY
14	S1-921-260-4A0		SENSING LEVER
15	S1-921-130-020		EJECT SLIDE LEVER
16	S1-921-141-3A0		P CONTROL SPRING
17	S1-921-140-820		PAUSE LEVER(F)
18	S1-921-140-120		PAUSE LEVER SPRING
19	S1-921-140-110		PAUSE STOPPER
20	S1-921-140-150		BUTTON LEVER SPRING(B)
21	S1-921-140-140		BUTTON LEVER SPRING(A)
22	S1-921-140-200		PR STOPPER
23	S1-921-140-090		SWITCH ACTUATOR
24	S1-821-011-590		E KICK LEVER
25	S1-921-140-080		PUSH BUTTON ACTUATOR
26	S1-921-050-060		SENSER
27	S1-921-053-030		TAKE UP REEL ASSY
28	S1-921-140-220		REC BUTTON LEVER
29	S1-921-053-040		SUPPLY REEL ASSY
30	S1-921-140-230		PLAY BUTTON LEVER
31	S1-829-100-100		BACK TENSION SPRING
32	S1-921-140-240		REW BUTTON LEVER
33	S1-921-140-250		FF BUTTON LEVER
34	S1-921-140-260		STOP BUTTON LEVER
35	S1-921-140-610		PAUSE BUTTON LEVER
36	S1-821-100-700		FF GEAR
37	S1-829-100-010		PACK SPRING
38	S1-821-100-690		RECORD SAFETY LEVER
39	S1-921-140-210		REC BUTTON LEVER SPRING
40	S1-921-260-020		CAM GEAR
41	S1-921-140-160		E ACTUATOR SPRING
42	S1-921-090-240		MAIN BELT
43	S1-921-093-030		FLYWHEEL ASSY
44	S1-921-070-030		RF BELT
45	S1-921-073-080		RF CLUTCH ASSY
46	S1-921-140-170		P.S.LEVER SPRING
47	S6-209-100-100		E HEAD PH-K380-MS1
48	S6-201-011-110		HEAD,RP7442ES-0951
49	S6-401-011-520		LEAF SW MSW-1541F
50	S1-821-010-500		PLAY BUTTON LEVER SPRING
A	S9-P33-200-320		DEL TITE SCREWM2-3
B	S9-422-000-000		P WASHER CUT 12-3.8-0.3
C	S9-679-000-000		P TAP SCREW M2-5
D	S9-999-180-090		TAP SCREW M2-4.5
E	S9-922-000-000		AZIMUTH SCREW M2-8
F	S9-115-000-000		+ BIND SCREW M2-3
G	S9-004-000-000		SCREW M2-6
H	S9-882-000-000		P WASHER 2-3.5-0.4
I	S9-999-200-410		P TAP SCREW M2-3
J	S9-999-030-130		P WASHER CUT 1.45-3.8-0.
K	S9-179-000-000		C TAP SCREW M2-3
L	S9-999-000-030		P WASHER2.1-4-0.13

TAPE MECHANISM EXPLODED VIEW 2 / 2

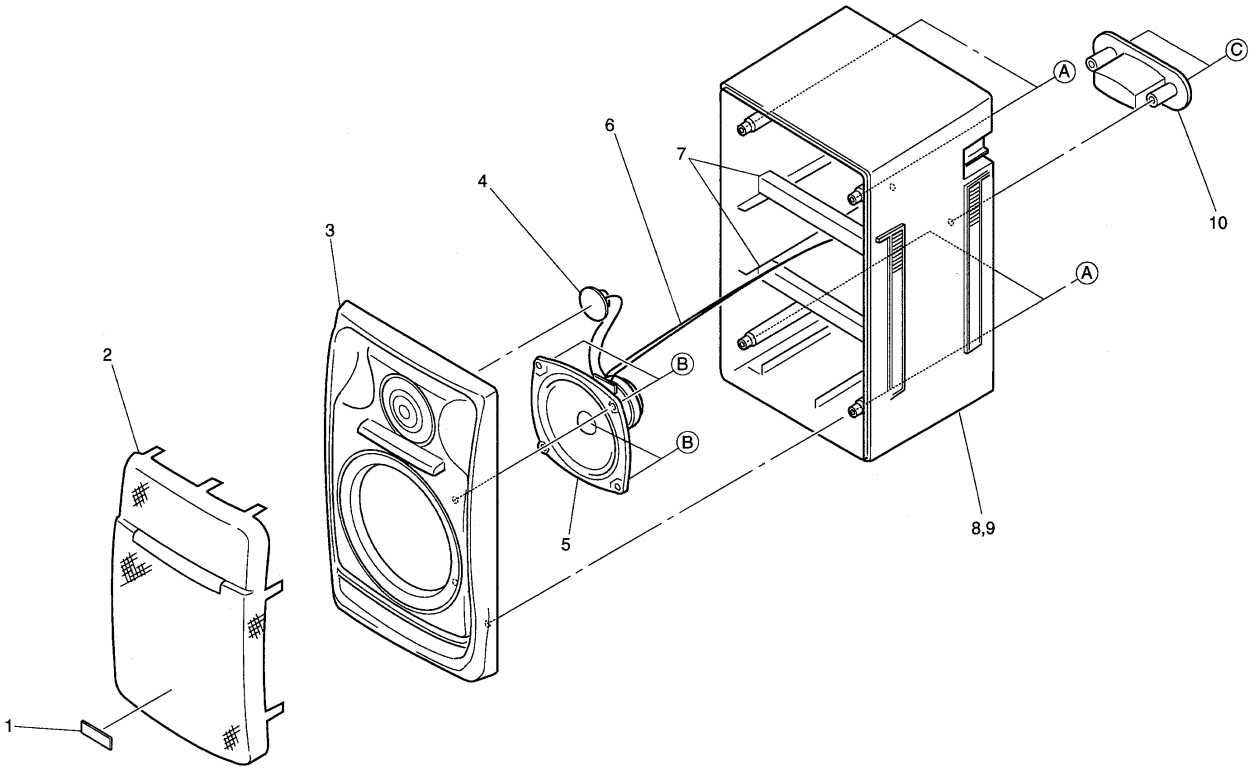


TAPE MECHANISM PARTS LIST 2／2

DESCRIPTIONで判断できない物は“REFERENCE NAME LIST”を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO.	PART NO.	カンリ NO.	DESCRIPTION
1	S1-921-030-4A0		HEAD BASE
2	S1-821-030-070		AZIMUTH SPRING
3	S1-921-030-030		PANEL P SPRING
4	S1-921-260-050		GEAR PLATE SPRING
5	S1-921-265-020		GEAR PLATE ASSY
6	S1-921-140-370		P ARM COLLER
7	S1-921-140-340		P ARM
8	S1-921-030-110		HEAD PANEL
9	S1-921-143-010		BASE ASSY
10	S1-921-141-8A0		M CONTROL SPRING
11	S1-921-260-4A0		SENSING LEVER
12	S1-921-043-090		PINCH ROLLER ARM ASY
13	S1-921-130-020		EJECT SLIDE LEVER
14	S1-921-141-3A0		P CONTROL SPRING
15	S1-921-140-820		PAUSE LEVER(F)
16	S1-921-140-120		PAUSE LEVER SPRING
17	S1-921-140-110		PAUSE STOPPER
18	S1-921-140-150		BUTTON LEVER SPRING(B)
19	S1-821-011-590		E KICK LEVER
20	S1-921-140-140		BUTTON LEVER SPRING(A)
21	S1-921-140-200		PR STOPPER
22	S1-921-140-090		SWITCH ACTUATOR
23	S1-921-140-080		PUSH BUTTON ACTUATOR
24	S1-921-140-230		PLAY BUTTON LEVER
25	S1-821-120-020		MOTOR COLLER SCREW
26	S1-921-140-240		REW BUTTON LEVER
27	S1-921-140-250		FF BUTTON LEVER
28	S1-921-140-260		STOP BUTTON LEVER
29	S1-921-140-610		PAUSE BUTTON LEVER
30	S1-821-100-700		FF GEAR
31	S1-921-050-060		SENSER
32	S1-921-053-030		TAKE UP REEL ASSY
33	S1-829-100-010		PACK SPRING
34	S1-921-053-040		SUPPLY REEL ASSY
35	S1-829-100-100		BACK TENSION SPRING
36	S1-821-120-650		COLLER B
37	S1-921-140-170		P.S.LEVER SPRING
38	S1-921-073-080		RF CLUTCH ASSY
39	S1-921-070-030		RF BELT
40	S1-921-260-020		CAM GEAR
41	S1-921-140-160		E ACTUATOR SPRING
42	S1-921-093-040		FLYWHEEL ASSY
43	S1-921-090-240		MAIN BELT
44	S1-820-130-060		MOTOR RUBBER
45	S1-921-120-130		MOTOR PULLEY
46	S6-002-030-290		MOTOR EG530YD-2BH
47	S1-821-120-680		P KICK LEVER (A)
48	S1-821-120-230		PK COLLER SCREW A
49	S1-821-120-250		P KICK LEVER SPRING
50	S1-921-120-110		MOTOR BRACKET
51	S1-921-120-090		P KICK LEVER
52	S6-201-011-110		HEAD,RP7442ES-0951
53	S6-401-011-520		LEAF SW MSW-1541F
54	S6-401-011-610		LEAF SW MSW-17820MVEI
55	S1-821-010-500		PLAY BUTTON LEVER SPRING
A	S9-P33-200-320		DEL TITE SCREWM2-3
B	S9-180-000-000		C TAP SCREW M2-4
C	S9-679-000-000		P TAP SCREW M2-5
D	S9-999-180-090		TAP SCREW M2-4.5
E	S9-004-000-000		SCREW M2-6
F	S9-115-000-000		+ BIND SCREW M2-3
G	S9-922-000-000		AZIMUTH SCREW M2-8
H	S9-182-000-000		C TAP SCREW M2-6
I	S9-422-000-000		P WASHER CUT 12-3.8-0.3
J	S9-999-030-130		P WASHER CUT 1.45-3.8-0.
K	S9-882-000-000		P WASHER 2-3.5-0.4
L	S9-999-000-030		P WASHER2.1-4-0.13
M	S9-999-200-410		P TAP SCREW M2-3

SPEAKER EXPLODED VIEW 1 ／ 1



SPEAKER PARTS LIST 1 ／ 1

DESCRIPTION で判断できない物は “REFERENCE NAME LIST” を参照してください。
If can’t understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO.	PART NO.	カンリ NO.	DESCRIPTION
1	S7-738-460-000		LOGO AIWA
2	S7-738-350-000		GRILL,SPKR
3	S7-738-300-100		PANEL,SPK
4	S3-270-010-000		BUZZER
5	S5-040-150-100		SPEAKER
6	S0-020-206-030		WIRE,SPK
7	S7-738-340-000		SUPPORT,WOOD
8	S7-738-310-000		CAB,SPKR(L)
9	S7-738-320-000		CAB,SPKR(R)
10	S7-738-330-000		HOLDER,CORD(BLK)
A	87-078-157-010		VT2+3-16
B	87-751-097-410		VT2+3-12
C	87-741-097-410		VT2+3-12

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER
サージサプレッサ	SERGESUPPRESSOR
セラコン	CAP,CERA

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL
ジグアーム	ARM,SHAFT
ジグガイド	GUIDE,SHAFT
ストラップ	STRAP
トクナベ	S-SCREW
ヒンジ	HINGE
ヒンジビス	S-SCREW
ビスセレート	SCREW,SERRART

サービス技術ニュース	
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